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APPROVED GEOGRAPHICAL WORKS.

By WILLIAM HUGHES,

Professor of Geography in King's College and Queen's College, London.

A MANUAL of GEOGRAPHY, Physical, Industrial, and Political. With Six Maps. Fcp. 8vo. 7*s.* 6*d.*

Or in two Parts:—Part I. EUROPE, 3*s.* 6*d.* Part II. ASIA, AFRICA, AMERICA, AUSTRALIA, and POLYNESIA, 4*s.*

This work, first published in 1852, was designed to supply the want, felt and acknowledged by all educationists, of a comprehensive Text-book which, while containing the details necessary to the description of exact locality, should treat Geography in a higher and more generous sense than that in which it had hitherto been (at least in our own country) regarded. The books then in most extensive usage in our schools—and, in too many cases, those that are still most extensively employed as class-books—exhibit Geography as no more than a dry record of names, duly classified according to locality, and appealing on the part of the learner to no other faculty than the memory. No wonder that, under such circumstanees, the subject of which they treat commands little interest, and is too often regarded as the least attractive of studies.

The evil complained of is apparent at a glance to any one who turns over the pages of the older geography-books of our Schools. It is, no doubt, less obvious in the case of many of the works of more recent date, but Geography is far from having yet attained the place in the educational curriculum to which it is entitled, and to which a true conception of its meaning and value would at once procure its admission. The author of the present 'Manual' claims to have been the first who sought to introduce into our schools the culture of Geographical Science, as distinguished from the effort to load the memory with mere names, and those, in too many cases, not worth the efforts often so painfully bestowed upon their acquisition. To accomplish this purpose, there was needed, as of primary importance, a book in which Geography should be treated as any other science is treated—that is, as a subject in which *cause and effect* are involved—in which every fact is connected with, and dependent upon, antecedent and consequent facts, and in the study of which the reasoning faculties are called into continual exercise. The vivid pictures of Nature which the subject gives occasion to introduce, in delineating the aspects of various lands and seas, impart, in the hands of the judicious teacher, a living interest to Geography, such as few other sciences can claim in equal, and none in fuller, measure.

Physical Geography—that is, the geography of the natural world, or a description of the aspects, climates, and productions of different regions—

forms the basis of the whole, and is accordingly the subject of distinct chapters in the present work, with reference to each of the great divisions of the globe, as well in the form of a brief Preliminary Dissertation relating to the earth at large. All else in the volume is shown to be more or less dependent upon the truths embodied in these chapters, and it is especially sought to trace the commercial resources, the exportable wealth, and productive industries of various lands in connection with their physical features and climate, as well as in relation to the varieties of race included within the different nationalities of which the earth's population is composed. To treat fully of the earth's natural productions, and of their utilisation by man—in other words, to describe the Geography of Commerce and Industry—was an important section of the task originally proposed to himself by the writer, and one of which the execution has been steadily kept in view throughout his labours.

It was in the course of experiences early acquired in the Battersea Training College, in 1841 and succeeding years, that the necessity of preparing or general use such a work as the 'Manual'—if the standard of geographical tuition were to be permanently raised in this country to anything approaching the level already attained in the schools of Germany and Switzerland—became obvious to the writer, and that the materials for its execution were in large measure collected. At that time but scant means of aid were attainable from any published sources. None of the physical maps which have since obtained so wide (and, in many cases, so well-deserved) a reputation had then appeared, and names of subjects which have now been long familiar to the teacher were then hardly known, or, if known, were only vaguely appreciated. That the writer's efforts in this direction bore some fruit was publicly attested in the 'Report on the Battersea Training Institution,' by the late Canon MOSELEY, in the Minutes of the Committee of Council on Education for 1846.

The numerous editions of the 'Manual' which have been called for—latterly of well-nigh yearly recurrence—have given opportunity for frequent revision, and for inclusion within each successive issue of the changes due to altered political arrangements, or resultant from the progress of colonisation, the extension of discovery, the increase of population, and other causes. Such opportunities have been eagerly utilised, large portions of each succeeding issue having been re-modelled, in many cases wholly re-written. In its present shape the Author confidently believes his work to embody all the leading facts in the geography—physical as well as industrial—of the different lands into which the earth is divided, and to form a *readable* (using that term as distinctive alike from a book of reference and from a mere school-book) as well as trustworthy account of the EARTH, its PRODUCTIONS, and its INHABITANTS. As such, it is commended to all who are interested in the promotion of Geographical Science, while the extensive patronage already shown to it, in the case of many of the higher schools of our country and her colonial dependencies, is at the same time gratefully acknowledged.

A MANUAL of BRITISH GEOGRAPHY, embracing the Physical, Industrial, and Descriptive Geography of ENGLAND and WALES, SCOTLAND, and IRELAND. With Four Maps. Fcp. 8vo. 2*s*.

London, LONGMANS & CO.

THE GEOGRAPHY

OF

THE BRITISH ISLANDS.

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THE GEOGRAPHY OF BRITISH HISTORY:

A GEOGRAPHICAL DESCRIPTION OF

THE BRITISH ISLANDS

AT SUCCESSIVE PERIODS

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FROM THE EARLIEST TIMES TO THE PRESENT DAY:

WITH A SKETCH OF THE PROGRESS OF COLONISATION ON THE PART OF THE ENGLISH NATION.

BY WILLIAM HUGHES,

AUTHOR OF 'A MANUAL OF GEOGRAPHY' ETC.

Rx. j. 27.

—'he himself, with that familiar interest which belonged to his favourite study of history and of geography, which he always maintained could only be taught in connection with it, would by his searching and significant questions gather the thoughts of his scholars round the peculiar characteristics of the age or the country on which he wished to fix their attention.'—STANLEY'S LIFE OF DR. ARNOLD.

NEW EDITION.

LONDON:
LONGMANS, GREEN, AND CO.
1874.

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PREFACE.

THIS book owes its origin to the Evening Classes of King's College, London. In conjunction with a fellow-labourer, the Author, during several successive winter-sessions, has been pleasingly engaged in the conduct of a class formed for the study of English History and Geography—the last-mentioned division of the subject falling to his own share. From the commencement of his task he felt the want of any sufficiently comprehensive work on the geography (historically as well as politically treated) of Great Britain and Ireland, such as he could recommend to the members of his class for use as a text-book. The endeavour to supply this want, and also the higher aim of producing such a work as may be found an available and useful companion to students in general of our country's annals, has led to the production of the "Geography of British History."

Those who have been accustomed to look at geography in its historical aspects, whether with reference to the countries of antiquity or to those of later times, will be at no loss to comprehend the sense in which the phrase "Geography of British History" is used by the writer. A glance at the contents of the earlier half of his volume will more particularly indicate the way in which the subject has presented itself to his view. By the geography of history, the writer understands not only what is universally admitted, at least in theory, to constitute the

basis of all historical study — viz., a description of the natural features, climate, and productions of a country; but, in addition, some account of its race (or races) of people, of their place in the family of nations, and of the successive stages by which they have advanced towards the position at which their proper history as a distinct nation begins. To these subjects he adds a commentary (geographical in its main features and purpose) on such external events as require reference to the Map for their full comprehension, and an adequate appreciation of which is admittedly necessary, not merely for the sake of the facts themselves, but from their place in the record of those changes, social and political, which belong to the higher aims of history. With these latter, the writer does not affect to interfere: he seeks only to cast on them such light as geography — using the word in its highest sense — may hope to supply. The distribution of population and industrial pursuits, the foreign and internal trade of a nation, and the characteristic conditions of its manufacturing and commercial industry, may be claimed as constituting a portion of his subject so regarded.

It may seem superfluous, in the present day, to offer any remark upon the importance of Geography as a branch of general study. Yet the writer believes that the value (and even necessity) of Geography, as forming part of a sound education, though universally admitted in theory, is very far from being recognised in practice. The geography still taught in too many of our schools is miserably defective — hardly, indeed, worthy of the name. It consists, too often, in little more than a dry and dull routine of names, appealing to the memory alone — unfruitful of any stimulus to the reflective powers of the mind, and unsuggestive of any connection with the higher aims of study. This (his own experience leads him to believe) is even yet, in a large

proportion of instances, the geography of ordinary middle-class education in our own country: in our higher seminaries of learning, Geography, in its modern aspects and relations, is scarcely recognised as worthy of being taught at all. Its very existence as a branch of study is ignored in our universities, and its culture, to whatever purposes pursued, leads to no direct result in the way either of honour or more substantial reward.* And this in a country which, more than any other, involves on the part of its citizens daily (and even hourly) contact with the productions of distant lands, and the place of which amongst the nations of the earth is intimately connected with a dominion exercised over the most distant lands and seas! Every ship which enters or leaves a British port, and nearly every article which ministers to the supply of our daily household wants, is standing evidence of the desirability of geographical knowledge on the part of the citizens of the British nation. The comparative neglect of the means of its acquisition in our endowed educational establishments is matter of remark to every foreigner, cognisant of the place which scientific geography occupies in the course of study pursued in universities and high-class schools abroad.

The writer has sought elsewhere to indicate the place of Geography in connection with the physical sciences: it is in its relation to history that it is here chiefly regarded. Such relationship, too liable to neglect in the case of our own country, is fully recognised in the instances of the great historic countries of antiquity. Our students bestow (and

* The writer gratefully acknowledges the partial exception adverted to in the opening paragraph above — an exception which may be regarded, he would fain hope, as neither temporary in its nature nor final in its present object. Will none of the colleges for the education of the youth of Britain recognise *Geography* as worthy a place in its prescribed course of study, and as meriting the establishment of a professorship for the assistance of its culture?

worthily bestow) elaborate care upon the geographical conditions of Greece and Italy, of ancient Egypt and Assyria. The minutest topographical details that are associated with the names of Marathon and Salamis, with the campaigns of Hannibal or Cæsar, are diligently sought out by the student. Should not the student of British History entertain something of correspondent interest in connection with Bosworth and Naseby, Clarendon and Runnymead; in the "local habitation" of the races by which our islands have been successively peopled; in the extent of Anglo-Norman dominion on the Continent; and in the geographical discoveries which immediately preceded the planting of our earliest colonial settlements? Surely these and kindred topics are at least of equal importance to the youth of Britain, in the nineteenth century, with the topography of the Thrasimene Lake or the Caudine Forks.

The sources of information to which the writer has turned are for the most part indicated in the notes dispersed throughout the volume. The present edition differs from those that have preceded it in the omission of much topographical detail—especially in regard to such of its elements as involve the fluctuating records of population—and in the inclusion of a fuller account of the course of colonisation. The portions of the work which deal with the natural features belonging to physical geography, and with the records of historic fact, have been preserved—the latter in some respects greatly extended. By the accompanying omission of topographical detail, the bulk of the volume has, notwithstanding, been materially reduced, and the reduction of price which it has thereby been possible to effect will, it is hoped, favour its yet farther introduction into our high-class schools, as well as its usage for the purpose of private tuition.

LONDON: *August* 1874.

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THE

GEOGRAPHY OF BRITISH HISTORY.

CHAPTER I.

GENERAL VIEW OF THE BRITISH ISLANDS.

SITUATION. — The British Islands are a considerable group, lying off the western side of the European continent, and not far distant from its shores. They are surrounded by the waters of the Atlantic Ocean. They consist of two large islands — Great Britain and Ireland — with many smaller groups and detached islets. In all, upwards of five thousand islets (the vastly greater number of them mere rocks) are enumerated as constituting the entire group.

The most northerly point of the British Islands is the extremity of Unst (one of the Shetland Islands), in 60° 49′ N. latitude. The most southward point, in the group of the Scilly Islands, is in 49° 53′ N. lat. The extreme extent of the British archipelago, in the direction of north and south, is therefore 10° 56′ of latitude, equivalent to 756 English miles (or 1,210 kilometres).*

* A *kilometre* (1000 metres) is equal to 1093·638 English yards, and is to an English mile in the ratio of 1 to 1·6. One English square mile is equal to 259 *hectares*, which latter measure is most frequently employed in continental countries for measures of surface. A hectare contains 10,000 square metres. These measures are based upon the length of the *metre*, which is equal to 39·371 inches, and is the ten-millionth part of the earth's quadrant.

The extreme east point of the British Islands is Lowestoft Ness, in long. 1° 46′ east of Greenwich. The group of islets called the Blaskets, off the south-west coast of Ireland (near Dunmore Head), are in 10° 36′ W. longitude. Between their extreme eastern and western points the British Islands therefore extend through 12° 22′, equal (on the line of the 52nd parallel) to 527 English miles, or 843 kilometres, and correspondent to 49 minutes 27 seconds of time.

Probably no equivalent extent of land, throughout the globe, is so favourably situated for all purposes of maritime commerce as the British Islands. They lie at only a moderate distance from the shores of the continent, but within the waters of the most extensively navigated of oceans. Their shores, infinitely varied in contour, comprehend a greater extent of coast-line than belongs (with, perhaps, the single exception of Greece) to any other region of correspondent superficial area. Between the coasts of England and France, at the narrowest portion of the Strait of Dover, the direct distance is scarcely more than 20 miles. This becomes increased, in the wider portions of the English Channel, to 60 miles, between the Isle of Wight and Cape Barfleur, on the French coast; and to 100 miles at the entrance of the Channel. On the eastern side of Britain, about 120 miles intervene between the mouth of the Thames and the estuaries of the Scheldt and the Meuse, on the Dutch coast. From the Humber to the entrance of the Elbe and the coast of the Cimbric Chersonese is a distance of about 350 miles. The southern and eastern sea-board of Britain is thus within easy access from the shores of the neighbouring mainland — at most only a few hours' sail distant. This fact helps to explain much of the earlier history of Britain, and cannot be too constantly kept present to the mind of the student, either of British history or geography.

Extent. — The entire area of the British Islands is 119,729 square miles (31,009,811 hectares), which is less than a four-hundredth part of the total land area of the globe. Of

this extent, Great Britain comprehends 84,032 square miles (21,764,288 hectares), and Ireland 32,513 square miles (8,420,867 hectares), the smaller islands of the group making up the total. Great Britain comprehends England, Wales, and Scotland, which have respectively the following areas:

England . . .	50,923 sq. miles,	or	13,189,057 hectares.
Wales . . .	7,397 „	or	1,915,823 „
Scotland (exclusive of islands) . .	26,014 „	or	6,737,626 „

SUPERFICIAL ASPECT.—The surface of the British Islands is highly diversified, and their scenic beauties of the most various description. Their higher elevations are for the most part in proximity to the sea — nowhere very far removed from its shores. The interior exhibits generally an undulating surface, almost everywhere varied by a pleasing alternation of hill and dale.

In the case of Great Britain, the higher elevations lie throughout upon the western side of the island, and culminate towards its northern extremity. The most extensive tracts of level ground are immediately adjacent to the east coast. In Ireland the high grounds are found in the vicinity of the coast, and the interior is generally level.

1. GREAT BRITAIN.—The island of Great Britain is bounded on the north by the Atlantic Ocean; on the east by the North Sea; on the south by the English Channel; on the west by the Atlantic Ocean, the North Channel, the Irish Sea, St. George's Channel, and the Bristol Channel. All of these seas are but portions of the Atlantic.

The Irish Sea, together with the North Channel and St. George's Channel, by which it is connected with the open ocean, divides Great Britain and Ireland. In its broadest part the Irish Sea is nearly 130 miles across. The narrowest portion of the North Channel is only thirteen miles wide: St. George's Channel is fifty-three miles across.

SCOTLAND is the northern portion of Great Britain; Wales

comprehends a part of its western side. The remaining and larger portion is England.

The highest mountain in Britain (and the highest point in the British Islands) is Ben Nevis, the summit of which is 4,406 feet above the sea. Ben Nevis is within the county of Inverness, and forms part of a prolonged chain of heights which stretch across Scotland, in the direction of east and west, not far distant from the line of the 57th parallel. This chain of high ground is known as the Grampian Mountains.

The Grampian Mountains, with the adjacent tracts of high ground which stretch far out on either hand from the principal line of elevation, cover the larger part of the region called the *Highlands*, which includes nearly all the north and west of Scotland. The east and the south of that country, though for the most part hilly, is distinguished as the *Lowlands*. Between the Highlands and the Lowlands there is a well-marked division — the valley known as Strathmore, or the great strath, which crosses the country in the direction of north-east and south-west, and will be described in a future page.

Mountains and high tracts of moorland cover by far the larger part of Scotland, especially within the highland region.

ENGLAND. — The boundary between England and Scotland is marked by the Solway Firth, the Cheviot Hills, and the lower course of the river Tweed.

The Cheviot Hills are a part of the high grounds belonging to southern Scotland. Their highest summit is 2,668 feet above the sea. From the Cheviot Hills, southward to the extreme limit of Britain, tracts of high ground occur at intervals — not continuously, but with intervening breaks.

The highest mountain in England is Scaw Fell, which reaches 3,229 feet above the sea. Scaw Fell is in Cumberland, and forms nearly the central point of a detached group, which covers great part of that county, with portions of the adjoining counties of Westmoreland and Lancashire.

The high grounds of England are of less proportionate

extent than those of North Britain. Scotland is altogether a mountainous country. Few parts of England claim the appellation of mountainous, though considerable portions may be termed hilly; but the larger part is merely undulating in surface.

WALES is principally mountainous. The high grounds cover nearly nine-tenths of its surface. The Welsh mountains reach their highest elevation in the north-west, where the summit of Snowdon, in Caernarvonshire, is 3,590 feet above the sea. The higher elevations lie in general near the western coast, whence the country declines gradually towards the valleys of the Severn, Wye, and other rivers, on the east. The most extensive level grounds are in the south, along the shore of the Bristol Channel. The Isle of Anglesea, which forms part of Wales, is chiefly level.

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2. IRELAND is fronted by the open ocean upon three sides — the north, west, and south; by the Irish Sea, with the North Channel and St. George's Channel, upon the east. Its highest elevations occur in the mountains of Kerry, in the south-west corner of the island, where the summit of Carrantual reaches 3,404 feet. The Mountains of Wicklow, in the south-east, are nearly as elevated.

The mountains of Ireland form detached groups, which front different portions of the surrounding seas, and fill up the numerous peninsular formations of its northern and western shores.

Every part of the British Islands possesses numerous running streams. No country on the globe, indeed, can lay claim to a better system of inland waters. Nearly all the principal rivers of Britain are navigable by vessels of considerable tonnage for some distance inland, and allow of boat-navigation through the chief part of their courses. The estuaries which they form at their outlets to the sea constitute harbours of first-rate importance. In such regards, the Thames, Mersey, Clyde, and Shannon, are not

inferior to any rivers in the world. These, together with the Severn, Humber, and Forth, take the first rank in order of importance among the rivers of Britain. The Severn and Mersey among the rivers of England, the Clyde among Scotch rivers, and the Shannon among those of Ireland, discharge into the seas on the western side of the islands; but the greater number both of the British and Irish streams flow towards the eastern coasts — a necessary result of the accumulation of high ground on the western shores.

The seas which surround the British Islands are deeper on the western side than off the eastern coasts. The German Ocean is shallow, compared either with the Irish Sea or the Channel. The mean depth of the German Ocean is not generally more than from 100 to 120 feet at a distance of about 40 miles from the shore: off the mouth of the Thames, it is about 120 feet; off the Wash, only 70 feet; off Flamborough Head, 120 feet; and off the coast of Northumberland, from 200 to 250 feet. At a greater distance from land, the mean depth of its bed is only about 145 feet in the parallel of Flamborough Head, and 100 feet in the latitude of the mouth of the Tyne, but it deepens considerably farther northward. In general, however, the central parts of the German Ocean are less deep than those nearer the land (excepting close in shore), owing to extensive banks, which occupy a large portion of its bed. The largest of these is the *Dogger Bank*, which stretches through its central part for more than 300 miles from north to south. Further to the south, the *Goodwin Sands*, off the coast of Kent, extending about 10 miles in length by 3 or 4 miles in breadth, form a dangerous impediment to navigation. The mean depth of water over the Goodwin Sands does not exceed from 6 to 10 feet. The deeper channel between these sands and the coast of Kent forms a roadstead called *the Downs*. An extensive bank which lies off the south coast of Essex forms the *Maplin Sands*. Numerous other sand-banks occur within the estuary of the Thames, and render the navigation near the mouth of that river exceedingly intricate and dangerous.

The English Channel gradually increases in mean depth from about 150 feet in its eastern, to between 250 and 300 feet in its western, portion: the deepest part of the sea between Beachy Head and the opposite coast of France is 210 feet; off the south coast of the Isle of Wight, 276 feet; and off the Land's End, at the entrance of the Channel, 380 feet.

The bed of the Irish Sea is deep throughout, and, excepting at its north-eastern extremity, is not generally less than from 200 to 400 feet in mean depth. Midway between the coast of Cumberland and the Isle of Man, the depth is about 100 feet; between the Isles of Man and Anglesey, 200 feet; and between Anglesey and the coast of Ireland, 400 feet. The central part of St. George's Channel has a mean depth of 300 feet; the sea near the western extremity of the Bristol Channel has an average depth of about 150 feet, which increases southward along the shores of Cornwall to 250 feet.

Thus, for a considerable distance immediately around the coast, the British seas have only a moderate depth, the soundings falling in general very considerably short of 100 fathoms (600 feet). But the whole group of the British Islands is based upon a submarine plateau. The line of 100 fathoms' depth lies about 50 miles to the west of the Scotch and Irish coasts. Thence the depth rapidly passes from 100 to upwards of 200 fathoms. It continues gradually to increase, until, at a distance of about 180 miles to the west of Ireland (in long. 15° W.), the sounding-line suddenly sinks from 550 to 1,750 fathoms—showing an immediate depression of 1,200 fathoms, a wall or precipice in the bed of the ocean. It is here that the deep basin of the Atlantic really begins.

The rise of tide is in general greater on the west than on the south or east coasts of Britain, and, owing to the fact that the estuaries on the west side of the island have their openings directed *towards* the advance of the great tidal wave of the Atlantic, the height which the tide attains in them is very considerable. In the Solway Firth, in More-

cambe Bay, and at the mouth of the Severn, the tide advances with great rapidity and impetuosity; and as its channel is narrowed by the nearer approach of the opposite shores, it rises to an astonishing height, amounting at the mouth of the Severn (near the junction of the Wye) to 45 feet. A similar phenomenon, though to a less conspicuous extent, occurs in the Wash, on the east coast. The general rise of the tides around the shores of England is, however, much less; at the mouth of the Thames, the ordinary rise is 16 feet; at Harwich, 12 feet; at Yarmouth, from 7 to 8 feet; at the entrance of the Wash, 23 feet; at the mouth of the Humber, 19 feet; and at the mouth of the Tyne, 15 feet. In the English Channel, off Brighton, the rise of tide is 18 feet; at Portsmouth, 16 feet; and at the mouth of Plymouth Sound, 16 feet. In the Irish Sea, the rise at the entrance of the Solway Firth is 21 feet; at the mouth of the Mersey, 26 feet; at Holyhead, 16 feet; off the entrance of Milford Haven, 22 feet; in Swansea Bay, 30 feet; at Cardiff, 38 feet; at the mouth of the Bristol Avon, 40 feet; in Barnstaple Bay, from 22 to 25 feet; and off the south-west coast of Cornwall, 19 feet. At the entrance of Dublin Bay, on the west side of the same sea, it is only from 12 to 13 feet; and further south, on the coast of Wicklow, much less.

CLIMATE.—The British Islands enjoy a temperate, and, for the most part, an eminently healthy climate. Their situation, in the middle latitudes of the temperate zone, near the western side of a continent, and surrounded by the waters of a vast ocean, secures to them advantages in this respect which are denied to other regions. Their freedom from great extremes of either cold or heat, their possession of an abundant (and yet not excessive) supply of moisture, are the most noteworthy of such conditions.

It is a well-known truth of Physical Geography, that the western side of either continent is warmer than its eastern side, and is also of more equable temperature. The British

Islands enjoy to the fullest extent such advantages, as well as those that belong to an insular position in general. The intense cold of a Russian winter, and the correspondent heat of a Russian summer, are alike unknown. Edinburgh is in nearly the same latitude as Moscow, but the difference of climate between the Scotch capital and the ancient metropolis of Russia is nearly as great as between the polar circle and the tropic. Between the mean heat of summer and winter, there is at Edinburgh a difference of less than nineteen degrees. At Moscow, the corresponding difference is above forty-eight degrees. Again, between the northern and southern extremities of Britain there is much less difference, especially in their respective winter temperatures, than is the case within a correspondent range of latitude on the continent. The winter temperature of the Isle of Wight does not differ perceptibly from that of the Shetland Islands. The connection of such facts as these with health is sufficiently obvious. Sudden and violent alternations of temperature are everywhere prejudicial to the human constitution: a comparatively equable temperature of air is attended by the most favourable results. The southern and western shores of the British Islands possess such advantages in higher measure than the eastern coasts. The southern coast-line of England, from the Isle of Wight to the Land's End, the coasts of South Wales, and the bay-indented shores of Kerry, offer the most striking examples. Upon the south side of the Isle of Wight, and in the extreme south-west of the Cornish peninsula, the severity of winter is unknown, and the myrtle thrives in the open air, throughout the year, as it also does upon the coast of Kerry, in the south-western corner of Ireland.

The lowest average of temperature is found upon the east coasts of England and southern Scotland, and principally within the tract which extends from the Naze, in Essex, to the Firth of Forth. This tract of country, with the adjacent districts inland, is the coldest portion of Britain.

The following Table gives the mean annual and seasonal

temperature experienced at several places, in various portions of the British Islands:—

	Mean temp. of winter.	Mean temp. of spring.	Mean temp. of summer.	Mean temp. of autumn.	Mean temp. of year.	Difference of summer and winter.
Penzance .	44·23	49·31	60·91	52·67	51·78	16·68
Falmouth .	42·31	48·47	58·45	51·83	50·27	16·14
Truro . .	41·63	51·37	58·37	52·10	50·87	16·74
Plymouth .	44·88	49·68	60·87	52·91	52·08	15·99
Exeter . .	36·33	45·33	57·67	47·67	46·75	21·34
Gosport . .	40·97	50·14	62·74	53·44	51·82	21·77
Chichester .	38·85	47·76	60·78	50·64	49·51	21·93
Bristol . .	40·33	50·33	64·33	51·67	51·67	24·
Swansea . .	45·50	49·67	63·67	56·	53·71	18·17
London . .	39·50	49·06	62·93	51·83	50·83	23·43
Oxford . .	37·	47·17	60·37	50·03	48·64	23·37
Cheltenham .	40·60	50·28	64·32	56·96	51·54	23·72
Bedford . .	40·51	51·10	62·68	52·25	51·64	22·17
Malvern . .	40·	41·53	60·	49·43	47·74	20·
Derby. . .	36·33	44·67	54·33	44·33	44·92	18·
Boston . .	37·74	48·24	61·98	48·54	49·12	24·24
Dublin . .	40·6	48·5	61·	50·	50·	20·4
Liverpool .	41·30	49·26	61·14	51·52	50·80	19·84
Manchester .	38·33	47·37	59·80	49·73	48·81	21·47
Bolton . .	38·80	47·93	60·50	49·37	49·15	21·7
York . . .	36·28	49·37	62·37	48·63	49·16	26·09
Lancaster .	37·08	44·21	56·83	47·32	46·36	19·75
Kendal . .	37·04	45·83	57·79	47·52	47·05	20·75
Whitehaven.	39·9	47·93	59·64	49·77	49·09	19·74
Keswick. .	37·53	45·51	58·6	47·48	47·28	21·07
Carlisle . .	37·25	45·49	57·39	47·76	46·97	20·14
Edinburgh .	38·45	45·	57·17	47·89	47·13	18·72
Dunfermline	36·66	43·03	55·19	46·01	45·22	18·53
Dundee . .	41·39	49·89	63·47	51·03	51·94	22·08

The frequent mists and watery vapours which obscure the skies of Britain, and prevailing moisture of its atmosphere, are a necessary result of geographical position. Every wind, from whatever direction, brings to the British coasts the vapours of a surrounding ocean. The prevailing winds are from the westward; these winds bring with them the mild and equable temperature derived from the vast expanse of ocean over which they have passed. Winds blowing from the south-west, especially, are warm, and are frequently

accompanied by moisture. North, north-east, and east winds are cold, and generally dry: those between west and north are of mixed character.

On a comparison of the number of days in the year upon which westerly and easterly winds have been found to blow, during a long period of observation, it appears that westerly winds exceed those from the eastern quarter of the heavens in the proportion of 225 to 140; and that the northerly exceed the southerly as 192 to 173. South-west winds prevail mostly from June to December (inclusive); north-east winds are of most frequent occurrence from January to May (inclusive). The lengthened prevalence of cold winds from the north-eastward, during the spring and early summer, constitutes the prime defect in the climate of Britain, and frequently operates as a check to the operations of agriculture.

More rain falls on the west than on the east side of Britain—a necessary result of the more immediate exposure of the western coasts to the vapours drawn from the Atlantic. This is strikingly shown in the subjoined Table, the places in which are arranged according as they are respectively situated on the eastern or the western side of the main line of watershed which intersects the island from north to south, dividing the sources of its eastern and western waters. The mean annual quantity of rain at each place is stated in inches:—

WEST SIDE.		EAST SIDE.	
Coniston	85 inches	Carlisle	30 inches.
Keswick	70 „	Bristol	30 „
Kendal	56 „		
Whitehaven	52 „	Sheffield	33 „
Bolton	47 „	Dover	30 „
Penzance	41 „	Hastings	28 „
Plymouth	40 „	Bedford	27 „
Falmouth	40 „	Derby	27 „
Exeter	36 „	Norwich	25 „
Manchester	36 „	Shields	25 „
Liverpool	35 „	York	24 „
Swansea	35 „	Scarborough	23 „
Salisbury	35 „	London	21 „
Cheltenham	32 „	Cambridge	20 „

Ireland has a moister atmosphere than Britain. The greater humidity of the air constitutes, in fact, the chief difference between the two islands, in respect of climate. The number of days in the year upon which rain occurs is said to be greater in Ireland than in any other country of Europe, amounting to 208. About 31 inches of rain fall annually at Dublin, and 40 inches at Cork. Westerly winds prevail during three-fourths of the year. The almost constant humidity of the atmosphere accounts for the verdure which is a well-known characteristic of Ireland. The trees remain longer in leaf than in the neighbouring island. These conditions belong in more especial measure to its western and south-western coasts.

The mineral riches of the British Islands are, in proportion to their extent, superior to those of any other country on the globe. The precious metals, gold and silver, are indeed wanting, or only occur in small and unimportant quantity; but the absence of these is more than compensated by the great abundance of nearly all the more useful productions of the mineral kingdom, including iron, tin, copper, lead, zinc, coal, and salt; besides a variety of others of less importance, as antimony, manganese, plumbago, alum, fuller's-earth, arsenic, &c. The southern half of Scotland, and the northern, central, and western parts of England (including Wales), are the chief localities of mining industry.

Ireland is less rich than Great Britain in mineral produce, but iron ore is abundant in many parts of the island, and there are mines of copper and lead.

The vegetable and animal productions of the British Islands are those which belong to the north temperate zone in general, and some particulars relative to their distribution are stated in subsequent pages. Wheat is capable of successful cultivation nearly as far north as the 58th parallel, beyond which only the hardier grains, as barley, rye, and oats, come to perfection. In the north of England, the

cultivation of wheat extends to the height of 1,000 feet above the level of the sea; oats grow at nearly double that elevation. In the north of Scotland, wheat does not succeed at a greater height than 400 feet, nor oats above 950 feet; but the hardier grain called *bigg* (a kind of barley) often ripens at 100 feet greater elevation.

Among the plants of larger size most widely spread over both England and Scotland, and forming some of the principal components of British vegetation, are the common oak, the elm, the birch, the alder, the hazel-nut, the aspen, the dwarf willow, the common yew, the blackthorn, the blackberry, the common ash, the holly, and the common dog-rose. The birch, alder, poplar, mountain-ash, and Scotch fir, are the principal native woods in Scotland.

The maple, the beech, the Spanish chesnut, the elm, and the common misletoe, occur chiefly in the southern part of England, and diminish in frequency northward. Every plant which is universally spread over the British Islands is also found within the middle latitudes of Western Europe.

The zoology of the British Islands does not now include any of the larger members of the animal kingdom belonging to the carnivorous order of mammalia; some which were formerly common, as the wolf, the bear, and the wild boar, have been gradually exterminated by the increase of population and the progressive advance of the arts of civilized life. The fox, preserved for the purposes of the chase, is now comparatively scarce. Both the badger and the otter were formerly much more common than at present. Two or three varieties of the weasel and marten are generally distributed, and the wild cat is still found in the wooded districts of both Great Britain and Ireland, but is most frequent in the north part of Britain.

Of the *rodentia*, or gnawing quadrupeds, the common squirrel is generally diffused in Great Britain, but has only lately been introduced into Ireland: varieties of the hare and rabbit tribe are dispersed throughout the islands. The Alpine hare, the fur of which becomes in winter

snowy white, is yet found in the higher parts of the Grampian region. The common dormouse is confined to Great Britain, but various species of mice and rats are universally distributed over the whole kingdom. The beaver, once common throughout the islands, has long become extinct; it continued, however, to inhabit one of the Welsh rivers,* down to the close of the 12th century. Of the *insectivora*, or insect-eating animals, the common hedgehog and the mole are generally dispersed over the fields and heaths of England, but the latter does not extend either into Ireland or the northern parts of Scotland. Ten species of the bat tribe are enumerated as occurring in different parts of the kingdom.

Among ruminating animals, besides the ordinary domesticated species, are the red deer or stag, still found within the high region of Exmoor, in the counties of Somerset and Devon, as well as in North Britain; the fallow deer; the roebuck (now rare in England, but abundant in some parts of Scotland); the common goat, yet found wild among the mountains of Wales; and the wild ox, the breed of which is preserved in the parks of some of our nobility. The red deer is found in Ireland, but the roebuck does not occur in that island. The remains of a large species of deer, commonly known as the Irish elk, which is now totally extinct, have been found in England and the Isle of Man, as well as in Ireland.

The domesticated quadrupeds, as the ox, sheep, horse, dog, and others, are numerous in every part of the British Islands.

Birds are very numerously distributed, and of the total number of species native to Europe, considerably more than half are found within our own shores. Most of these are birds of small size, as the nightingale, blackbird, linnet, thrush, goldfinch, skylark, and others belonging to the

* The Teify (Giraldus Cambrensis: Itinerary of Archbishop Baldwin, 1188). It was also still found, according to the same authority, in one of the Scotch rivers,—we are not told which.

family of warblers; besides the sparrow, wren, and many others of general distribution. Some of the birds most numerous in Britain are migratory in their habits, as the swallow, cuckoo, martin, and others, which only visit these islands on the approach of the summer: others, again, as the redwing, fieldfare, woodcock, snipe, and some aquatic birds, are winter visitors, migrating hither from more northern latitudes. Birds of the gallinaceous order — including the domestic poultry, besides partridges, grouse, and pheasants, though numerous as individuals, are less so as species. The ptarmigan only occurs here in the highest and wildest parts of Scotland, and the islands of the Hebrides and Orkney groups; the red grouse is peculiar to the British Islands. Among birds of prey, the falcon and hawk tribes occur, but the former are becoming scarce; the golden eagle, the largest bird found in the British Islands, frequents the higher mountain regions both of Great Britain and Ireland, but is chiefly found in the north of Scotland. Another species of eagle, the white-tailed or sea-eagle, is common in the Hebrides and the Orkney and Shetland Islands.

Of the total number of reptiles known to the naturalist, the British Islands possess only thirteen, but five of which are natives of Ireland. Frogs and toads are pretty generally diffused. The common viper or adder, and also the harmless ringed snake, are common in all parts of Great Britain, though the latter of these is less numerous in Scotland than the former: no snakes occur in Ireland.

The seas which lie around the shores of Britain are exceedingly abundant in the kinds of fish most generally useful as the food of man, as the cod, turbot, mackerel, herring, pilchard and many others. Most of these frequent shallow water, and the shores and banks of the North Sea teem with the greatest abundance of them. The Dogger Bank, midway between the coast of England and Holland, is (next to the banks of Newfoundland) the seat of the most extensive cod-fishery; and the cod is also taken in considerable

numbers all round the shores of Britain, particularly on the north and west coasts of Scotland. The herring is extensively diffused all round our shores; the mackerel is chiefly abundant on the southern coasts of England; and the pilchard in the western extremity of the English Channel, near the counties of Devon and Cornwall. All of these fish are gregarious, and alternately approach the shores in vast swarms as the season for spawning draws near, and afterwards retire during winter into deeper water. The crab, lobster, oyster, shrimp, and prawn, are also abundant round the shores of Britain and on the south side of the English Channel, and, small as some of these are, their fishery is of considerable commercial importance.

A vast number of insects occur in every part of the British Islands, many of which are familiarly known by our ordinary and daily observation. These, however, though interesting to the naturalist, and designed to fulfill important functions in the economy of the natural world, require no special notice in so general a survey as the present.

CHAPTER II.

PHYSICAL GEOGRAPHY OF ENGLAND AND WALES.

AREA, COAST-LINE, &c.—The southward division of Britain includes ENGLAND AND WALES. These must be treated, for the purpose of geographical description, as one country. Wales, however, as we shall see, has some important characteristics peculiar to itself, and, though united to the English Crown during upwards of five centuries, it was long the seat of a distinct government, as it still is of a population different in many respects from that of the larger country which it adjoins.

The figure of England and Wales is triangular. The western is the longest of its three sides, and is the most irregular in outline. The eastern side is next in point of length. The most northerly point is the town of Berwick-upon-Tweed; the most southwardly is the promontory of the Lizard, in Cornwall. A straight line drawn between these points measures 425 miles (680 kilometres). The most easterly extreme is Lowestoft Ness, in Suffolk; the most westerly is the Land's End, in Cornwall. A straight line drawn from Lowestoft Ness to the Land's End measures 371 miles (593 kilometres).

A triangular figure formed by three straight lines, drawn to connect the town of Berwick-upon-Tweed, the South Foreland (Kent), and the Land's End, gives a general representation of the shape of England and Wales, allowance being made for the fact that each of such lines cuts off large projecting portions of land.

The joint area of England and Wales is 58,320 English square miles (15,104,880 hectares), of which England

comprehends 50,923 (13,189,057 hectares), and Wales 7,397 (1,915,823 hectares). Wales is, therefore, little more than one-seventh part the size of England.

The coast-line of England and Wales is exceedingly varied, though less minutely so than that of the more northwardly portion of Britain. Its length, measured along the principal estuaries and salt-water inlets of every kind, exceeds 1,800 miles. This is in the ratio of one mile of coast-line for every thirty-two miles of surface—a proportion which could of course only occur in the case of an insular region. No part of England is, indeed, more than a hundred and twenty miles distant from the sea in a direct line—few parts so far removed as a hundred miles.

The principal indentations of the English coast are :—

On the east side (*from north to south*).

1. Mouth of the Tees.
2. Filey Bay.
3. Bridlington Bay.
4. The Humber.
5. The Wash.
6. Mouth of the Thames.

On the south coast (*from east to west*).

1. Langston Harbour.
2. Portsmouth Harbour.
3. Southampton Water.
4. Weymouth Bay.
5. Tor Bay.
6. Plymouth Sound.
7. Falmouth Bay.
8. Mount's Bay.

On the west coast (*from south to north*).

1. St. Ives Bay.
2. Barnstaple Bay.
3. Bristol Channel.
4. Swansea Bay.
5. Caermarthen Bay.
6. Milford Haven.
7. St. Bride's Bay.
8. Cardigan Bay.
9. Mouth of the Dee.
10. Mouth of the Mersey.
11. Mouth of the Ribble.
12. Mouth of the Lune.
13. Morecambe Bay.
14. Mouth of the Duddon.
15. Solway Firth.

The most extensive of these are the Humber, the Wash, and the estuary of the Thames, upon the east coast; the Bristol Channel, Cardigan Bay, Morecambe Bay, and the Solway Firth, on the west side of the island.

Coasts.—The western shores of Britain are generally bolder and more elevated than the eastern, and in the

portion of the island now under description the most continuous lines of high and rocky coast occur on the shores of South Wales and Cornwall. About three-eighths of the whole length of the western coast consist of cliffs, the remainder either of low sandy, or marshy, land.

Rather more than half the south coast of England is lined by cliffs, which are generally higher in the western than in the eastern part of the channel. The promontory of Portland Bill is the termination of a narrow strip of land called the Isle of Portland, though really a peninsula, and connected with the mainland by the Chesil Bank — a ridge of shingle upwards of ten miles in length, composed of loose rounded stones.

On the east coast, the cliffs which occur to the north of Flamborough Head are bold and elevated; those to the south of that point form in general low and nearly level walls, composed either of clay or chalk. Immediately to the south of the Humber, round the west and south of the Wash, and also on great part of the coast of Essex, the shores are low and marshy.

CAPES.—Amongst the numerous headlands which belong to the coast of England and Wales, the following are the most important:—

On the east coast (from north to south).

	Height.		Height.
Filey Point (Yorkshire)	feet	The Naze (Essex)	100 feet
Flamborough Head (Yorkshire)	214 „	Foul Ness (Essex)	„
Spurn Head (Yorkshire)	„	Shoebury Ness (Essex)	„
Lowestoft Ness (Suffolk)	119 „	North Foreland (Kent)	184 „

On the south coast (from east to west).

South Foreland (Kent)	370 feet	St. Albans Head (Dorset)	344 feet
Dunge Ness (Kent)	92 „	Portland Bill (Dorset)	30 „
Beachy Head (Sussex)	564 „	Berry Head (Devon)	„
Selsey Bill (Sussex)	„	Start Point (Devon)	„
St. Catherine's Point (Isle of Wight)	178 „	Bolt Head (Devon)	430 „
Durleston Head (Dorset)	„	The Lizard (Cornwall)	224 „

On the west coast (from south to north).

	Height.		Height.
Land's End (Cornwall)	100 feet	Braich-y-Pwll (Caernarvon)	feet
Hartland Point (Devon)	350 „	Linas Head (Anglesey)	128 „
Mumble Head (Glamorgan)	114 „	Great Orme's Head (Caernarvon)	673 „
Worms Head (Glamorgan)	164 „	Point of Aire (Flint)	„
St. Goven's Head (Pembrokeshire)	„	Formby Point (Lancashire)	„
St. David's Head (Pembrokeshire)	„	St. Bees Head (Cumberland)	333 „

SURFACE OF LAND.—The high grounds of England and Wales lie principally on the west side of the island. No tracts entitled to the epithet of mountainous, and few heights that exceed a thousand feet above the level of the sea, are found within that part of the island which lies south of the parallel of 53° and east of the meridian of 2° W.

The most elevated portions of England and Wales constitute four distinct regions, three of them situated in close proximity to the western coast, and the fourth lying only a moderate distance inland. These are:—

1. *The Pennine range*, which stretches from the border of Scotland southward to the valley of the Trent.

2. *The Cumbrian Mountains*, which form a well-defined group, situated within the counties of Cumberland and Westmoreland, with the detached portion of Lancashire known as Furness.

3. *The Welsh Mountains*, which fill the greater part of the principality of Wales.

4. *The high grounds of Devon and Cornwall*, which stretch through the extreme south-western peninsula of England.

The second and third of these regions exhibit a truly mountainous aspect, and present bolder features than are elsewhere found in our island, to the south of the Tweed.

1. The name of Pennine has been applied, by general consent, to the extensive range of high ground stretching south from the Cheviot Hills to the district of the Peak, in Derbyshire, through a length of

170 miles, and forming a kind of back-bone to a considerable portion of the island. The Pennine range does not form a continuous mountain-chain, but rather a succession of high moorlands, within portions of which are rounded masses of hill that rise above the general level of the whole. The breadth of the moorland region is considerable, the high grounds which line the Yorkshire and Lancashire border being in some parts as much as forty miles across in the direction of east and west. In their northwardly portion, however, the hills exhibit more the character of a dividing ridge, and the high ground is of narrower limits.

The Cheviot Hills are a part of the high grounds which spread over southern Scotland. Their highest elevation, Cheviot, a round-topped mountain on the border of Northumberland and Roxburghshire, is 2,668 feet in altitude. The Pennine range has its commencement from the western extremity of the Cheviot Hills, and stretches thence to the southward. A partial depression occurs about the line of the 55th parallel, but, with this exception, the high grounds nowhere exhibit any material depression until they sink towards the valley of the Trent.

Among the most conspicuous elevations which belong to the Pennine range (from north to south) are the following: —

Kilhope Law (Northumberland)	2,196 feet	Rye Loaf (Yorkshire)	1,796 feet
Collier Law (Durham)	1,685 „	Great Whernside (Yorkshire)	2,310 „
Cross Fell (Cumberland)	2,927 „	Pendle Hill (Lancashire)	1,816 „
Mickle Fell (Yorkshire)	2,580 „	Boulsworth Hill (Lancashire)	1,689 „
Nine Standards (Westmoreland)	2,136 „	Whittle Hill (Lancashire)	1,629 „
Water Crag (Yorkshire)	2,187 „	Rivington Pike (Lancashire)	1,545 „
The Calf (Westmoreland)	2,188 „	Blackstone Edge (Yorkshire and Lancashire)	1,923 „
Shunnor Fell (Yorkshire)	2,329 „	Holme Moss (Yorkshire and Cheshire)	1,859 „
Wild Boar Fell (Westmoreland)	2,327 „	Kinderscout, Peak (Derbyshire)	1,981 „
Cam Fell (Yorkshire)	2,245 „	Lord's Seat, Peak (Derbyshire)	1,816 „
Whernside (Yorkshire)	2,384 „	Axe-edge Hill, Peak (Derbyshire)	1,809 „
Ingleborough (Yorkshire)	2,373 „	Weaver Hill (Staffordshire)	1,154 „
Pen-y-gent (Yorkshire)	2,270 „		
Fountain's Fell (Yorkshire)	2,190 „		

Cross Fell, the highest point of the range, is near the border of

Cumberland and Durham, and includes the sources of the South Tyne and the Tees, both of them flowing into the German Ocean. Whernside, Ingleborough, Pen-y-gent, and Pendle, adjoin the valley of the Ribble, which flows towards the western coast. The Pennine range, indeed, includes throughout the watershed between the eastern and western seas, though the dividing line does not always coincide with that of the highest elevations.

The Peak (in Derbyshire) is not an isolated hill, but a region of rounded hills and high moorlands, intersected by deep valleys. Its highest point is Kinderscout. From the Peak southwards, the high grounds sink towards the valley of the Trent, forming several long valleys or dales, which are watered by the tributaries of that river.

Geologically, the Pennine range is composed entirely of rocks belonging to the carboniferous series. Mountain limestone, the lowest of these in order of succession, extends continuously from the border of Scotland to the valleys of the Aire and Ribble (including the whole of the latter, as far down as the neighbourhood of Preston), and reappears in the Peak district of Derbyshire. The intervening tract is composed of millstone-grit, which throughout borders the higher limestone rocks on their eastern side. Coal appears in immediate contact with the millstone-grit;—in the north, to the eastward of the high grounds; in the south, upon either side of them.

Three considerable coal-fields, with a fourth of much smaller area, adjoin the Pennine region, and include some of its lower elevations. These are, the Northumberland and Durham, the Yorkshire and Derbyshire, the Lancashire, and the North Staffordshire (or Potteries) coal-fields.

Many portions of the Pennine range exhibit cavernous formations, which are a general characteristic of the mountain-limestone rocks. The famous "Devil's Cave," in the Peak, offers a well-known example. The Ingleborough caves are another. The streams in several instances disappear for a time beneath the surface. Thus, Malham Tarn, at the head of the Aire valley, discharges itself, not by a surface channel, but by subterranean passages. The river Nidd is swallowed up near Lofthouse. Streams which gather on the moorland fells sink in many places into smaller holes of limestone below, or wind through subterranean caverns.*

2. The Cumbrian Mountains form a distinct group, connected, however, with the Pennine chain by a transverse range of high

* The Rivers, Mountains, and Sea-coast of Yorkshire. By John Phillips, F.R.S. (London, 1855.)

ground, which divides the upper valleys of the Eden and the Lune. They fill the chief part of the peninsular region which terminates to the west in the high sandstone promontory of St. Bees Head.

The principal elevations belonging to the Cumbrian group are:—

Scaw Fell (Cumberland)	3,208 feet	Red Pike (Cumberland)	2,750 feet
Helvellyn (Cumberland and Westmoreland)	3,118 „	High Street (Westmoreland)	2,700 „
Skiddaw (Cumberland)	3,022 „	Grisedale Pike (Cumberland)	2,680 „
Fairfield (Westmoreland)	2,950 „	Coniston Old Man (Lancashire)	2,633 „
Great Gavel (Cumberland)	2,925 „	Hill Bell (Westmoreland)	2,500 „
Bow Fell (Cumberland and Westmoreland)	2,914 „	Langdale Pikes (Westmoreland)	2,400 „
Rydal Head (Westmoreland)	2,910 „	High Pike (Cumberland)	2,157 „
Pillar (Cumberland)	2,927 „	Causey Pike (Cumberland)	2,030 „
Saddleback (Cumberland)	2,847 „	Black Combe (Cumberland)	1,969 „
Grassmere Fell (Cumberland)	2,756 „	Wansfell (Westmoreland)	1,590 „

The higher portions of the Cumbrian group exhibit a more rugged and truly mountainous aspect than any other part of England, and they surpass any other elevations in altitude. Scaw Fell Pikes, the most central point of the system, is the highest mountain in England. The distinguishing feature of this region is found in its numerous lakes, which impart to its scenery a charm that is in general wanting elsewhere in South Britain. The valleys of this region, long and narrow in shape, radiate from its central point like the spokes of a wheel, and nearly every one of them is the bed of a lake.

The geological formation of the Cumbrian group exhibits for the most part rocks of slaty texture. These comprehend all the central and higher portion of this tract of country — that is, all the mountain region, properly so called. These slaty rocks belong to the Silurian period of geologists. They are surrounded on every side by sedimentary rocks of later origin, belonging principally to the carboniferous and new red sandstone epochs.* Upon the north-west

* "The lakes of the north of England (says Professor Phillips), like those of Scotland, Wales, and some districts of Ireland, are situated

there is a coal-field of moderate extent, which abuts upon the shore of the Irish Sea, and the workable strata of which dip beneath its waters. Iron ore of the most valuable kind abounds within the western portion of the mountain area. Veins of copper, lead, and other minerals, occur within the same region. The new red sandstone of the coast, from Whitehaven southwards to St. Bees Head, is extensively quarried as building stone. A valuable mine of plumbago, or black lead (properly *graphite*), is worked in the high valley of Borrowdale, in the heart of the mountain region.

3. The Welsh Mountains consist neither of a single mountain range nor a succession of connected chains. They form rather an extensive mountain region, in some places spreading out into high plateaus intersected by deep valleys, and in others rising into peaks of considerable elevation, which constitute the summits of broad masses of highland. The highest elevations occur in general at a short distance from the west coast, on which side the mountains have a more rapid slope than on their eastern border. In South Wales, however, the most considerable elevations are in ranges which run in an east and west direction, and lie at some distance inland.

The highest of the Welsh mountains is situated near the north-western extremity of the system, where the extensive mass of Snowdon rises into three summits of nearly equal height, the most elevated of them 3,590 feet above the sea,—a greater elevation than is attained in any part of Britain to the southward of the plain between the Firths of Forth and Clyde. Both to the north and south of Snowdon are many summits which are from 2,500 to above 3,000 feet in height.

About twenty-seven miles to the S. by E. of Snowdon is Cader Idris, 2,959 feet; to the eastward of a line joining these two points is an extensive area of country, comprehending the upper part of the valley of the river Dee, which is probably not less than 600 feet above the level of the sea, even in its lower portions, and in which numerous high summits occur. The south-eastern boundary of this region is formed by the Berwyn range, which bounds the valley of the Dee on the south, and in which the highest summits vary from 1,000 to 2,000 feet in height, and many rise above 2,000 feet. The

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among the most ancient of the stratified rocks, including slaty formations with organic remains, and others still older, which have not as yet yielded any fossils. These strata form, in a general sense, one broad rugged dome, surrounded on the flanks by later deposits of old red sandstone, mountain limestone, millstone-grit, coal, and new red sandstone."—*Geology of the English Lakes.*

country lying between the western extremity of the Berwyn hills and the high mass of Snowdon, embracing the chief part of Merionethshire, presents the most varied surface in Wales. The rivers which descend from its western slope, falling into Cardigan Bay, run through narrow valleys, and form in their course a continual succession of rapids and cataracts. To the southward of Cader Idris a similar country extends along the shores of Cardigan Bay as far as the river Ystwith.

In the country which lies around the eastern and southern sides of the high tract above described, the mountains are of less elevation, though they still cover the greater part of the surface; but the valleys here expand into greater breadth, and the Vale of Clwyd, watered by the river of that name, is a beautiful and fertile district, from five to seven miles across. The hills which bound the east side of this valley descend in gentle swellings and undulations into the plain of Cheshire. The peninsula of Caernarvon has a range of hills — an offset from the Snowdon Mountains — running through its centre, but is low towards the shores on either side, except in its southernmost extremity.

Plynlimmon — a huge mountain with three summits, the highest of which rises to 2,481 feet — lies ten or twelve miles distant from the shore of Cardigan Bay (lat. 52° 28′). To the south and south-east of Plynlimmon, extending for a distance of about thirty miles, as far as a range called the Epynt Hills, is a mountain tract of very desolate character, which forms the most extensive waste in Wales. It presents no regular chains, but a succession of rounded hills and depressions, the surface of which is covered with mosses and peat, resting upon clay. Some parts of it consist of extensive bogs, among which, however, are scattered tracts of pasture land, covered with thin herbage. The peat is extensively used as fuel. To the east of this high and desolate tract, the country is still hilly; but with more gentle declivities, and interspersed with wider valleys, which admit of cultivation. The hills of Radnor Forest are 2,163 feet in height. This part of the country has a gradual slope eastward, towards the valley of the Severn, and is drained on the south by the river Wye and its tributaries.

The southern declivities of the Epynt Hills are divided by the valley of the Usk from the extensive range of the Black Mountain, or Forest Fawr, which contains the highest summits in South Wales. The mountains of this range are too steep and rocky to admit of cultivation, but are in general covered with herbage, and afford good sheep-walks. They derive their epithet of 'Black' from the dark appearance presented by the heath when out of blossom, and the dreary blackness of their general aspect. The highest summit of the

chain, called the Van or Beacon of Brecknock (a few miles south of the town of that name), is 2,862 feet above the level of the sea.

To the south of the Forest Fawr are the mountains of Glamorgan, which form an extensive and wide-spread region, stretching out in various directions; these, though not so elevated as the hills further north, present a more mountainous aspect, from the steepness of their declivities, the narrowness of the valleys, and the pointed peaks and narrow ridges with which the upper parts are crowned. Between the southern edge of this mountain tract and the Bristol Channel extends the *Plain* or *Vale of Glamorgan*, an undulating district, intersected by hills of gradual slope and small elevation: this plain extends on the east into the adjacent county of Monmouth, where it forms a low, flat tract near the coast, and is only preserved from the inundations of the sea by embankments of great extent. This level region is extremely fertile.

To the west of the Plain of Glamorgan, the country adjacent to the coasts of Caermarthen and Pembroke, and extending for some miles inland, has a gently undulating surface. Around the northern shores of Caermarthen Bay are some low, marshy tracts, of considerable extent. The peninsula of Gower, situated between Swansea Bay and the estuary called Burry River, is chiefly level, and resembles the Plain of Glamorgan.

The greater part of the Welsh mountains consists of rocks which geologists know as the Upper and Lower Silurian formations, and is composed of hard limestones and shales, with variously coloured sandstones. The Lower Silurian strata occupy all the central and western part of the mountain region; these are frequently of slaty texture, and slate is quarried in many parts of this tract, chiefly in the counties of Caernarvon and Merioneth. The only metallic ores which occur in these rocks are lead and cobalt, both in small quantities, and also copper, towards the northern part of the principality. But both at the north-eastern and southern extremities of the mountain region are extensive formations of carboniferous limestone, in which are valuable mineral deposits, including coal and iron, and also lead, copper, zinc, and other metals.

Among the principal summits within the Welsh mountain region are: —

Snowdon (Caernarvon) . . . 3,570 feet	Cader Idris (Merioneth) . . . 2,959 feet
Carnedd Llewellyn (Caernarvon) . . 3,469 „	Arran Mowddy (Merioneth) . . 2,955 „

Moel Shiabod (Caernarvon)	2,878 feet	Plynlimmon (Cardigan and Montgomery)	2,481 feet
Beacons of Brecknock	2,862 „	Radnor Forest	2,163 „
Carnedd-y-Filiast (Merioneth and Denbigh)	„	Precelly (Pembroke)	1,757 „
Arrenig (Merioneth)	2,816 „	Tregaron (Cardigan)	1,747 „
Cradle (Brecknock)	2,660 „	Blawrenge (Monmouth)	1,720 „
Rhinog Fawr (Merioneth)	2,345 „	Penmaen-mawr (Caernarvon)	1,540 „

4. The high grounds of Devon and Cornwall are divided from the region of the Welsh Mountains by the broad estuary of the Bristol Channel. They comprehend, in the north of Devonshire (and partly within the adjacent county of Somerset) the tract known as Exmoor; in the centre and south of Devon, the extensive plateau of Dartmoor; and, in Cornwall, a prolonged succession of high moorlands which stretch through the whole length of that county, terminating only in the promontories of the Lizard and the Land's End.

The principal elevations within this part of England are:—

On Exmoor, Dunkery Beacon (Somersetshire)		1,668 feet
On Dartmoor:	Yes Tor	2,050 „
	Amicombe Hill	2,000 „
	Newlake Hill	1,925 „
	Cawsand Beacon	1,792 „
	Rippin Tor	1,549 „
	Butterton Hill	1,203 „
Cornish Heights:	Brown Willy	1,364 „
	Rough Tor	1,296 „
	Tober Tor	1,127 „
	Sharp Point Tor	1,200 „
	Trewartha Tor	1,050 „
	Hensbarrow	1,027 „

Dartmoor, which constitutes the main mass of the Devonshire highlands, forms a plateau of irregular surface, extending about twenty-two miles in the direction of north and south, and fourteen miles from east to west. Granite rock forms the nucleus of the entire region, and the principal elevations consist of huge masses of the same material. The highest point of Dartmoor, Yes Tor, is near its northern extremity (three miles S. of Oakhampton). Amicombe Hill is between two and three miles to the southward; Cawsand is further to the

east and north. The most elevated portions of the moor are found towards its northern and north-western extremity. The general elevation of the higher portion of the mountain plain is probably upwards of 1,200 feet. The steepest ascent to the mountain region is on the south, and the rivers on that side flow through deep and narrow valleys.

The high surface of Dartmoor is a wild and in most parts a barren tract, with very little grass, and the soil is in many places boggy. The granite is extensively quarried for building-stone. The slaty rocks which extend around the east, south, and west sides of Dartmoor (constituting what geologists know as the Devonian formation) are rich in mineral productions, including tin, copper, lead, iron, and manganese, as well as other metals in smaller quantities. Excellent limestone for building purposes, and also beautiful veined marbles, are worked in many places, chiefly near the south coast, and in the neighbourhood of Tor Bay.

The river Tamar, which forms the boundary between Devonshire and Cornwall, divides the highlands of Dartmoor from the elevated masses of the latter county, the higher portions of which consist also of granite. The *Cornish Highlands* stretch through the entire extent of the county, not forming a connected mountain chain, but a succession of wide-spread moorlands. The most extensive, and also the highest, of these is in the same parallel as Dartmoor: it contains the hill called Brown Willy, 1,364 feet in height. The high granite plain upon which this is situated extends about ten miles from east to west, and six or seven miles from north to south, and has an average height of about 800 feet. It is a dreary waste, without trees, and, like Dartmoor, has a boggy soil. The bottoms of the valleys are covered with bogs, in many places more than 12 feet deep, the lower part of which consolidates into peat.

In the more southern part of Cornwall, the highlands are of narrower extent, and form a single axis, which has a rapid slope towards the sea on either side. Hensbarrow, near St. Austell, is 1,027 feet high. In the extreme south-west peninsula, between St. Ives and Mount's Bays, the mountains form several elevated masses, varying from 600 to 800 feet in height, and granite cliffs form the high promontory of the Land's End. The more eastern peninsula, which terminates in the Lizard, is composed of serpentine, a rock of volcanic origin.

The Cornish highlands are the chief seat of produce of tin and copper, the principal mines of which are situated in the western part of the county, in the district between St. Austell and the Land's End: the mines chiefly occur at the points where the hard limestones and clay slates are intersected by the granite rocks.

Lead is also worked, but not to any great extent. Granite is extensively quarried.

The high regions above described, stretching, as they do with little interruption, from north to south along the whole western side of South Britain, exercised during the earlier periods of British history a highly important influence over the social condition of its inhabitants, and, as we shall hereafter see, they were long divided politically from the rest of the island.

The hills found in other parts of England are in general of greatly inferior altitude to the regions above described. They impart diversity of surface, however, to many parts of the island, especially to some of the northern, midland, western, and southern counties. These lesser elevations may be arranged (with reference merely to geographical position) under four headings:—

1. The hilly regions in the neighbourhood of the north-eastern coast, between the Tees and the Wash.

2. The high grounds which intervene between the Wash and the course of the Thames.

3. The hills which adjoin on either hand the valley of the Severn.

4. The hills lying southward of the Thames, between that river and the shores of the Channel, with the adjacent high grounds to the westward, as far as the valley of the Ex.

1. The first of these regions comprehends the *North York Moors*, with *the Wolds of Yorkshire and Lincolnshire*. Among these are the following elevations: —

North York Moors:	Botton Head	1,489 feet
	Loosehoe Hill	1,404 „
	Black Hambleton	1,246 „
	Roseberry Topping	1,022 „
York Wolds:	Wilton Beacon	809 „

Between these tracts of high ground and the heights of the Pennine range, there intervenes the extensive plain of York. The

York Moors, and also the northernmost portion of the York Wolds, approach close to the shores of the German Ocean. In the chief part of their extent, however, the Wolds are divided from the sea by a low tract known as Holderness. The Wolds of Lincoln are similarly divided from the sea by an intervening tract of low country.

The higher portions of the North York Moors belong geologically to the oolitic series: these are succeeded, on their lower extensions, by limestones of the lias period.

The Wolds, both of York and Lincoln, consist entirely of chalk. Speeton Cliff, on the shore of Filey Bay, is the most northwardly extremity of the chalk which forms so large a portion of the eastern and southern coast-line of England.

2. The high grounds between the eastern side of the Wash and the north bank of the Thames comprehend—

The Chiltern Hills.
The East-Anglian Heights.
The Middlesex and Essex Heights.

The Chiltern Hills are a range of high chalk downs, which stretch in a north-eastwardly direction from the banks of the Thames (in the bend of the river which occurs between Henley and Wallingford) through the counties of Oxford and Buckingham, and into Hertfordshire. Thence the chalk is prolonged (in the same general direction of north-east, and passing a little to the east of the towns of Newmarket and Cambridge) through the counties of Cambridge, Suffolk, and Norfolk, till it terminates at Hunstanton Cliff, on the east side of the Wash. It is to the northward prolongation of the Chiltern range that the name of East-Anglian Heights is, for the sake of a general designation, applied. Among the highest elevations in this prolonged range are Kensworth Hill, in the NW. of Hertfordshire, 904 feet, and Ivinghoe Beacon, 903 feet. The Gog-Magog Hills (to the SE. of the town of Cambridge) are only 302 feet high.

The Middlesex and Essex Heights comprehend the detached high grounds which lie to the northward of London—as the hills of Harrow, Hampstead, and Highgate—with those that stretch through the middle portion of Essex (from the banks of the Lea and Roding, through Hainault and Epping Forests, and thence to the neighbourhood of Colchester). The elevation of these heights is inconsiderable, but they impart much diversity of surface to the district which they traverse. Langdon Hill, in Essex (SE. of Brentwood), reaches 620 feet above the sea. The summit of Highgate Hill is 426 feet, of Hampstead 430 feet.

3. The river Severn runs, in the upper portion of its course, through the high region of the Welsh mountains, deriving its head

waters from Plynlimmon. After leaving the mountain region (shortly before it enters the Shropshire plain), it flows through a valley of considerable breadth, bounded on either side by detached tracts of high ground.

Among the high grounds which adjoin the valley of the Severn and its estuary are: —

On the west.	*On the east.*
Long Mynd (Shropshire).	The Wrekin (Shropshire).
Caradoc Hills (Shropshire).	Clent Hills (Worcestershire).
Wenlock Edge (Shropshire).	Lickey Hills (Worcestershire).
Clee Hills (Shropshire).	Edge Hills (Oxford and Warwick).
Abberley Hills (Worcestershire).	Cotswold Hills (Gloucestershire).
Malvern Hills (Worcester and Hereford).	Mendip Hills (Somerset).
Dean Forest (Gloucestershire).	Polden Hills (Somerset).
	Quantock Hills (Somerset).

The ground which bounds the valley of the Severn to the eastward is generally of inconsiderable height in its northern part, but rises into hills further to the southward. The Wrekin (to the south-east of Shrewsbury) is a detached eminence, 1,320 feet in height. The Clent Hills (in the NE. part of Worcestershire) are 1,007 feet in elevation; the Lickey Hills, further to the southward, are about 800 feet. The Edge Hills, on the borders of Oxfordshire and Warwickshire, towards the south-western limit of the central plain of England, are 826 feet. East of the valley of the lower Severn is the prolonged oolitic range of the *Cotswold Hills*, the highest of which, — Cleeve Hill, near Cheltenham, — is 1,134 feet. The Cotswold Hills (which derive their name from the ancient sheep-cots formed on the hills or wolds) terminate on the north-east side of the Avon of Bath and Bristol, the former of which cities they surround in a beautiful amphitheatre: Lansdown Hill, to the north of Bath, is 813 feet high. On the opposite side of the Avon, a few miles south of Bristol, is Dundry Hill, an isolated eminence belonging to the same formation as the Cotswolds, 790 feet high.

The Valley of the Severn is a continuation of the plain country of Cheshire and Lancashire, and, together with that tract, completely divides the mountains of Wales from the rest of the island. Its western boundary is formed by the high ground connected with Wenlock Edge and the elevations of the Clee Hills, in Shropshire — the Malvern Hills, on the borders of Worcestershire and Herefordshire — and the hilly district of Dean Forest, further to the south.

The ranges of high ground which occupy the western part of

Shropshire, to the east and south of the Severn valley, exhibit much diversity of aspect. The Breidden Hills (adjoining the extreme western border of Shropshire, but chiefly within Montgomeryshire) reach 1,199 feet. These hills immediately adjoin, to the eastward, the valley of the upper Severn, by which they are divided from the mountains of Wales. To the east and south-eastward of the Breidden Hills and their connected heights succeed the Stiper Stones, the Long Mynd, the Caradoc Hills, and the prolonged ridge of Wenlock Edge, the three former lying in the general direction of N. and S., the last-named in that of NE. and SW. The highest point of the Long Mynd reaches 1,674 feet, and the Caradoc Hills (in the neighbourhood of Church Stretton) 1,200 feet.

The Clee Hills rise to 1,805 feet. Hereford Beacon, the highest point of the Malvern Hills, is 1,444 feet above the sea. The Malvern Hills form a continuous but narrow range, nine miles in length, extending nearly in a straight line from north to south: on the east they rise at a considerable angle from the level of the valley, but on the west their ascent is more gradual, and the country exhibits in that direction a succession of low hills for the distance of some miles.

The high tract of Dean Forest has an elevation of about 900 feet, and forms a kind of undulating table-land, in some parts bleak and bare, in others yielding a short grass well adapted for sheep-pasturage. The wooded part consists of oak and beech trees, which formerly supplied a great quantity of valuable timber.

4. The portion of England lying south of the Thames, and embracing the extensive tract of country which stretches westward from the coast of Kent to the valley of the Devonshire Ex, is chiefly distinguished by the prolonged ranges of chalk downs which stretch through the larger portion of its extent.

The chalk of the southern counties forms two well-marked lines of elevation, distinguished respectively as the North and South Downs. The *North Downs* stretch from the neighbourhood of Dover, through Kent and Surrey, into the north of Hampshire. The *South Downs* extend from Beachy Head westward along the coast of Sussex and thence through the middle part of Hampshire (past Winchester) to the neighbourhood of Salisbury. Both ranges consist throughout of chalk.

In the east part of Kent, the chalk tract of the *North Downs* spreads out to a considerable breadth; but in advancing westward, it gradually assumes more of the character of a single ridge. The elevation of the hill upon which Dover Castle stands, on the north-east-side of the town of Dover, is 469 feet: the hills near Hollingbourn, east of Maidstone, exceed 600 feet. Botley Hill, on the borders of Kent and Surrey, is 880 feet. Leith Hill, 967 feet, to

the south-west of Dorking, in Surrey, and also Hind Head, further westward, are separated from the range of downs by a slight depression: neither of these two belongs to the chalk formation. To the west of Guildford, the high lands form a narrow ridge, which has the name of the Hog's Back, and runs westward in an unbroken line, for a distance of 6½ miles, to the neighbourhood of Farnham: the high road between these places runs on the top of the ridge. In the north-west corner of Hampshire, on the borders of Berkshire, are Highclere Beacon, 900 feet, and Inkpen Beacon, 1,011 feet, the latter of which is the highest chalk hill in the island.

The country on the north side of the range above traced has a gradual slope towards the valley of the Thames, exhibiting for the most part a varied and undulating surface, with rounded hills and elevated downs, as the high grounds about Epsom, and also Banstead Downs, in the north of Surrey; and Bagshot Heath, further westward, in the neighbourhood of Windsor.

From Beachy Head, which consists of chalk cliffs 564 feet high, the *South Downs* run near the shores of the English Channel as far west as Brighton, whence they diverge inland, leaving between their base and the sea a tract of undulating surface, which gradually increases in breadth as the hills stretch further west. Ditchling Beacon (six miles to the north of Brighton) is 814 feet high; Rooks Hill Beacon (four miles north of Chichester), 702 feet; and Butser Hill (near Petersfield, in Hampshire), 882 feet. A transverse ridge of chalk, called the Alton Hills, runs northward from Butser Hill, and connects the South with the North Downs.

A considerable part of the district intervening between the North and South Downs, embracing the south-west portion of Kent and the adjacent portions of Sussex and Surrey, is called the Weald, from the ancient Saxon name for wood. This was formerly an immense forest, inhabited by swine and deer, and it still includes some extensive woodlands; but the greater part is now under cultivation, and is a highly fertile tract of country, the principal seat of the hop-culture.

Neither the North nor the South Downs form continuous ridges, but, like the chalk elevations in other parts of the island, are in several places cut through by river-valleys. The watershed between the streams which flow on the one side into the English Channel, and those which in another direction join the basin of the Thames, is found in a range of heights intermediate between the North and South Downs, and belonging to a distinct formation,—that called the Wealden (from the district of the Weald, above mentioned), which consists of various clays and sands. The chain of the *Wealden Heights* commences near Folkestone (to the

south-west of Dover), and extends through the south part of Kent, and nearly along the northern borders of Sussex, where it forms the high ground of Ashdown and Tilgate Forests. Some parts of this range are from 600 to 800 feet high: Crowborough Beacon, on Ashdown Forest, is 804 feet.

In the south part of Kent, adjacent to Dunge Ness, is a marshy tract, called Romney Marsh, a large portion of which consists of land reclaimed from the sea, and preserved from its inundations by artificial means.

In the southern part of Wiltshire, and chiefly on the west side of the valley of the Avon, is *Salisbury Plain*, a tract of high undulating country, which extends about 20 miles from east to west, and about 15 from north to south. It is for the most part a barren and woodless district, covered with a short thin grass, and only admitting of cultivation in the valleys of the streams by which it is crossed. The mean height of Salisbury Plain above the level of the sea is perhaps from 500 to 600 feet. The Marlborough Downs, a similar tract, adjoin Salisbury Plain on the north, and stretch eastward into the adjacent county of Berkshire, towards the valley of the Thames.

The high grounds of Salisbury Plain and the Marlborough Downs belong to the chalk formation, and are united on the east with the ranges of the North and South Downs; on the north-east they are only divided by the course of the Thames from the chalk of the Chiltern and East-Anglian Hills, already described. The basin of the lower Thames forms a deposit of clay, which is thus intermediate between two great lines of cretaceous formations.

The chalk of Salisbury Plain is prolonged to the south-west, through the northern part of Dorsetshire, as far as the neighbourhood of Beaminster, in that county. The continuous range of high ground which the chalk downs here form has sometimes been designated the Dorset Heights. Horn Hill, near Beaminster, is the western extremity of the chalk formation. From Horn Hill a range of chalk heights runs eastward, at a short distance from the coast, through the peninsula called the Isle of Purbeck, where it terminates in the cliffs of Ballard Down, opposite the Needles, in the Isle of Wight, fifteen miles further to the east. A line of chalk hills extends through the centre of the Isle of Wight, from the Needles, on the west, to Culver Cliff, on the east side: the highest point of this, Motteston Down, is 698 feet; but St. Catherine's Hill, in a detached range near the south point of the island, is 830 feet in height, and is the most elevated part of the island.

The chalk ranges of the South Downs and their western prolongation through Dorsetshire, on the one side, and those of the Purbeck Heights and the Isle of Wight, on the other, mark the limits of an

extensive basin of clay, which embraces the south part of Hampshire, with the adjacent portions of Sussex and Dorsetshire, as well as the northern shores of the Isle of Wight. Towards the eastern part of this basin is Portsdown, an isolated mass of chalk, 447 feet high. In its central part, between the Avon and the estuary of Southampton Water, is the high tract of the New Forest, a wooded district, which supplies abundance of oak and other timber.

From the south-western extremity of Salisbury Plain, a succession of high grounds, (not forming, however, any continuous range of great extent) may be traced westward along the borders of Somersetshire, dividing that county from the adjoining counties of Dorset and Devon. A portion of these have been already spoken of, under the name of the Dorset Heights. Further to the westward are the *Blackdown Hills*, on the borders of Somerset and Devon, which form the southern boundary of the Vale of Taunton.

In the most western part of Somerset, and the north of Devonshire, is *Exmoor*, a high tract of land of considerable extent, which measures about 20 miles from east to west, and about 12 from north to south. Dunkery Beacon, its highest point, is 1,706 feet above the sea. The higher portions of Exmoor contain peat swamps of many acres in extent: it is almost destitute of trees, except on the banks of the rivulets by which it is watered, and which chiefly belong to the valley of the Ex. The whole tract forms an extensive sheep-pasture.

The high grounds of Exmoor, the Blackdown and Dorset Hills, Salisbury Plain, and the Marlborough Downs, with the southern and south-eastern slopes of the Cotswold Hills, enclose on three sides a considerable tract of country, belonging to the basin of the Bristol Channel, and watered by rivers which flow into that estuary. The limits of this tract nearly coincide with those of the county of Somerset, which has great variety of surface.

In the north part of Somersetshire are the *Mendip Hills*, which run in a general direction of east and west: their top forms a high flat, with a rapid slope on either side. The highest of the Mendip Hills is 1,100 feet; they belong chiefly to the mountain-limestone formation, and contain lead and calamine, as well as copper, manganese, and ochre.

To the south and south-west of the Mendip Hills is *Brent Marsh*, a low tract of land, which is naturally an immense swamp, but has been much improved by draining. It contains a great deal of peat, which furnishes fuel to the inhabitants. South of this marshy district are the *Poldon Hills*, a range of trifling elevation; and further west, on the opposite side of the valley of the Parret, the

Quantock Hills, the highest parts of which are 1,270 feet in elevation. The Quantock Hills are separated from the Blackdown Hills by the Vale of Taunton, a highly fertile tract.

The most eastern part of Devonshire, with the adjacent portion of the county of Dorset, extending westward from the termination of the chalk ranges, is a hilly tract, in which are some ranges of high land, of small extent; these stretch from the neighbourhood of the Blackdown Hills to the sea-coast, and fill up the tract watered by the rivers Axe and Otter. Pillesdon Pen, in the western extremity of Dorset, is 934 feet high.

The south-western extremity of England forms a peninsular region, the high grounds of which are divided from the rest of the island by the valleys of the rivers Ex and Tawe,—the former flowing into the English Channel, the latter into Barnstaple Bay, at the entrance of the Bristol Channel. A straight line drawn from the town of Exeter to Baggy Head, on the north side of Barnstaple Bay, marks the north-eastern limit of the high lands of Devonshire and Cornwall, which attain a greater elevation than any other part of England to the south of the Trent.

PLAINS AND VALLEYS.—The most extensive area of perfectly level ground in the island is found upon the eastern coast of England, adjoining the shores of the Wash. This is the tract known as the district of the Fens, from the marshy aspect which formerly distinguished it, when unreclaimed by culture. Some tracts of like description, but of much smaller extent, occur on other parts of the coast. The plains and valleys which elsewhere alternate with the hilly parts of the island are by no means flat or monotonous in aspect, but present almost throughout that pleasing variety of undulating surface which is the general characteristic of English scenery.

For the sake of precise description, we may enumerate the following as the principal plains and valleys within the southern half of Britain:—

1. The York Plain.
2. The Cumbrian Plain.
3. The Cheshire Plain.
4. The Valley of the Severn.
5. The Plain of Glamorgan.
6. The Central Plain.
7. The Fen District.
8. The Eastern Plain.
9. The Valley of the Thames.
10. The District of the Weald.

1. *The Plain or Vale of York* slopes eastward from the high grounds of the Pennine chain towards the German Ocean. Only its northwardly portion, however, reaches the sea: in its middle and southward divisions the Moorlands and Wolds of Yorkshire, and the Wolds of Lincoln, limit the plain to the eastward, and divide it from the ocean. In its furthest limits, the extent of the plain is upwards of 160 miles in the direction of north and south. East and west, it measures about 30 miles across, in a line with the city of York, but further south, under the parallel of the Humber — its widest portion — expands to a breadth of 45 miles. That portion of the plain which lies to the north of the Tees (within the counties of Durham and Northumberland) is narrowed by the near approach which the high grounds of the Pennine chain there make to the waters of the German Ocean.

The York Plain includes one of the most extensive river-valleys in the island — that formed by the united streams of the Ouse and the Trent, and within the very heart of which, upon the banks of the Ouse, the ancient city of York is situated. The lower portions of the rivers Tees, Wear, and Tyne, also fall within its limits, to the northward.

The western division of this extensive plain belongs, geologically, to the carboniferous system, all three members of which — mountain limestone, millstone-grit, and coal-measures — are largely developed within its limits. The high grounds of the Pennine range, by which it is bordered on the west, are almost wholly composed of carboniferous limestone. The millstone-grit and the coal-measures are succeeded to the eastward by a narrow belt of magnesian limestone, which runs (in the direction of north and south) through nearly the whole length of the plain, and within the limits of which are worked numerous quarries of good building-stone. To this succeeds a somewhat broader belt of new red sandstone. The eastern limits of the plain are marked by the oolitic limestones of the North York Moors, and the chalk of the Wolds.

The extensive plain above described includes two considerable coal-fields — one within the counties of Northumberland and Durham (where the plain reaches on the east to the waters of the German Ocean), the other stretching through the West Riding of Yorkshire and into the adjoining counties of Derby and Nottingham.

2. The tract here distinguished as the *Cumbrian Plain* adjoins the upper portion of the Solway Firth, and includes the broader part of the valley of the Eden. The greatest dimensions are east and west, in which direction the plain measures about 30 miles across. The hills on its eastern side rise with a steep ascent.

The greater part of this plain belongs to the new red sandstone formation. It is bordered on the south by a belt of magnesian limestone. The tract immediately adjoining the head of the Solway Firth is low and mossy. This forms the well-known Solway Moss, part of which falls within the Scotch border.

3. The *Cheshire Plain* comprehends, together with the middle and western portions of the county of that name, a large part of the adjoining county of Lancaster, including the coast district from Morecambe Bay southward, and all the tract watered by the middle and lower portions of the Mersey. The plain country is limited to a mere narrow strip along the northerly portion of the Lancashire coast, but in the south of Lancashire, and in the adjacent county of Chester, it has a breadth of from 30 to 35 miles.

Tertiary formations immediately adjoin the Lancashire coast, but the larger part of the Cheshire plain belongs to the new red sandstone formation. Vast beds of rock-salt, and also brine-springs, occur within the valley of the river Weaver, the most considerable affluent of the Mersey. The southward portion of Lancashire includes an extensive coal-field, which extends from the plain country over the high moorlands belonging to the Pennine chain.

4. The *Valley of the Severn* (limiting the term to the country watered by that river after it has issued from the mountain region) forms a southwardly continuation of the Cheshire Plain. Together with that tract, it completely divides the mountains of Wales from the rest of the island. The broadest portion of the Severn Valley is to the north of the city of Worcester, where it measures about 15 miles across. But its breadth is much more limited in the chief part of its extent, by the closer approach of the high grounds upon either side.

Portions of the Valley of the Severn are locally distinguished as the Vale of Worcester, the Vale of Gloucester, and the Vale of Berkeley. The last-mentioned of these lies wholly to the east of the river, in its lower course, and stretches along the foot of the Cotswold Hills. The Vale of Evesham, which opens into the Valley of the Severn on the eastward, is watered by the Upper Avon. These valleys are throughout distinguished by great natural beauty, and uniformly possess a rich and fertile soil.

The predominant geological feature of the region is new red sandstone, bordered on the east by limestone of the lias period, and on the west by old red sandstone. The Shrewsbury, Coalbrook Dale, Dean Forest, and Bristol coal-fields, fall either within or immediately adjacent to its limits.

5. The *Plain of Glamorgan* (or Vale of Glamorgan, as it is locally termed) stretches along the northern shores of the Bristol Channel

for a length of above 40 miles, and with a breadth, in its widest part, of about 10 miles. It is for the most part an undulating region. The eastward continuation of the plain, extending from Glamorgan into the adjoining county of Monmouth, is low and flat near the coast, and is only preserved from inundation by artificial means. This strictly level tract is a region of great natural fertility.

6. The term "*Central Plain*" may be used to designate that portion of England which includes the larger number of the midland counties, embracing in the direction of north and south the country which extends from the banks of the Trent to the upper portion of the Thames Valley, and reaching east and west from the hills that border the Severn Valley to the low grounds of the Fen district. This is not a level plain, but rather a moderately elevated and undulating region, without any prominently marked variety of surface. Many of the principal rivers of England have their origin in this district, which, however, exhibits no well-defined line of watershed, and is devoid of any striking feature of superficial contour. Its average elevation varies from 200 to 400 feet: the town of Buckingham is 265 ft.,—Northampton, 274 ft.,—Oakham, 362 ft.,—Leicester, 326 ft.,—and Birmingham, 349 ft., above the sea. The tract between the sources of the Welland and the Nen, which flow into the Wash,—the Avon, which runs past Stratford and Evesham into the Severn,—and the Soar, which belongs to the basin of the Trent,—has perhaps the greatest average elevation. The sources of all these rivers are within a few miles of each other —those of the Welland and the Avon less than three miles apart; the Ouse, and some of the tributaries of the Thames, have their origin in the more southern part of the same region.

Three detached coal-fields occur in the central plain, in the neighbourhoods of Coventry, Ashby-de-la-Zouch, and Dudley, all situated towards its northern and western portion; the last is of the greatest extent, and is the seat of an extensive iron manufacture.

7. The *District of the Fens* embraces the low tract lying round the shores of the Wash, and derives its name from the fact of its having formed, in a natural state, a vast fenny or swampy region, a large portion of which was formerly covered, at least at intervals, by the sea. It extends over parts of the counties of Lincoln, Northampton, Huntingdon, Cambridge, Suffolk, and Norfolk — the first-named of them including the larger portion of its area. Geographically, the low tract which intervenes between the Lincolnshire Wolds and the sea, with the district of Holderness, to the north of the Humber, and the low grounds which border that river up to the confluence of the Trent and the Ouse, belong to the same region.

The fenny nature of this extensive tract of country was due to its

almost perfect level, which gave no sufficient outfall to the waters. The substratum of the Fen district consists of stiff clay, upon which is a covering of earth and accumulated vegetable matter: many parts of it are now very fertile, but have only been rendered so by immense outlay of money, and the drainage of the whole region is still imperfect.* In the western part of the Fens there were formerly some extensive shallow lakes or meres, which owed their origin to the accumulation of water from the flatness of the whole district, and the consequent want of outfall. The largest of these was Whittlesea Mere, which exceeded two miles in length: it has within a recent period been drained, and an area of above 1,500 acres reclaimed for cultivation.

8. The *Eastern Plain* of England is the generally level tract which extends between the district of the Fens and the shores of Norfolk, Suffolk, and Essex, the larger portion of which counties falls within its limits. Geologically, this tract is divided between the cretaceous and the tertiary formations, together with, on portions of the coast, masses of drift, and other rocks of recent or post-tertiary origin.

The chalk of this part of England begins on the north at Hunstanton Cliff, on the eastern side of the Wash, and extends thence without any break to the valley of the Thames.† Chalk forms the

* A large portion of the Fen country is commonly known by the name of the Bedford Level, from the circumstance of the Earl of Bedford having formed a company for the purpose of its drainage, in the time of Charles I. The drainage was originally effected by means of windmills, after the practice common in Holland, and the water thereby raised into artificial channels and carried off to the sea; steam-engines are now chiefly employed for this purpose. The most swampy region, and that which has caused the greatest expense in drainage, belongs to the lower courses of the Ouse and Nen, and the low grounds about March, Wisbeach, and Whittlesea. The earliest reclaimers of the soil in this district were the Romans, whose causeways, stretching across the marsh-land, are still traceable. Next after them, the Saxons (whose former abodes, on the marshy shores of Friesland, had made them intimately familiar with such conditions of nature) laboured in the same work. Religious recluses settled, in numerous instances, upon reed-grown islands which rose above the general level of the surrounding fens, and found a safe retreat in such spots. Ely, Crowland, Thorney, Ramsay, and other abbeys, were so situated. Canute, sailing in his ships over the surrounding waters, listened to the monks of Ely singing. The district, however, for centuries after those times, and down even to a recent period, remained for the most part a swampy wilderness, and unhealthy vapours rose everywhere from the damp soil. Ague and fever abounded, and an ague-stroke was familiarly known in the Fens as "an arrest by the bailiff of marsh-land." (*Lives of the Engineers*, by Samuel Smiles: London, 1861.)

† See *ante*, p. 30.

subsoil through more than two-thirds of the area of Norfolk and Suffolk. An irregular line drawn from the neighbourhood of Cromer, on the Norfolk coast, past Norwich, to the river Orwell, above Ipswich, and thence to the valley of the river Lea, below Hertford, divides the chalk from the clay of the London basin and the "crag" * of the eastern coast. Upon the coasts both of Norfolk and Suffolk the estuaries of the streams are bordered by alluvial matter, consisting of clay, gravel, and boulders, known by the general name of "drift."

9. The *Valley of the Thames* stretches back from the extensive estuary of that river to within less than 30 miles of the western coast, and is bordered on either side by the high grounds described in a preceding page.† These grounds nowhere reach any considerable height in the immediate neighbourhood of the river, excepting in the bend which it makes some miles above Reading, where the chalk of the Chiltern Hills abuts upon the stream.

The lower portion of the Thames valley coincides with the extensive deposit of clays and sands, known geologically as the London clay. This attains its greatest breadth in the neighbourhood of the metropolis, and spreads over by far the larger part of the county of Essex. Above London its breadth gradually lessens, and it becomes lost in the chalk within the western part of Berkshire.‡ Fresh-water deposits border the clay in the lower portion of the Thames estuary, upon either side. Above Abingdon, the course of the Thames is through the various deposits which belong to the oolitic limestone group.

10. The *District of the Weald* includes parts of the counties of Kent, Sussex, and Surrey. It is an extensive plain or valley, enclosed on three sides — the north, west, and south — by the high grounds of the chalk. The range of ground described under the name of the Wealden Heights (p. 33) intersects it in the direction of east and west, and forms the line of division, or watershed, between the streams that join the Thames and those that flow into the English Channel.

Geologically, the tract of the Weald represents an extensive

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* The term "crag" is applied to a shelly deposit of sand, clay, and gravel, belonging to the older divisions of the tertiary series, and extensively developed in this part of England.

† See *ante*, pp. 30, 33.

‡ The clay reappears in the south of Hampshire, and covers an extensive area in that county, stretching along the line of the southern coast from the neighbourhood of Brighton on the east to the Isle of Purbeck (Dorsetshire) on the west. It includes all the northern division of the Isle of Wight. This clay basin is completely enclosed by the chalk.

estuary, within which were deposited numerous plants and animals that were among the former inhabitants of the older adjacent formations, and the remains of which are now found mixed with the sedimentary deposits of marine origin. Fresh-water shells also occur within its limits. The name of "the Wealden group" has been given to the variously coloured clays, sands, shelly limestones, and shales, which belong to this extensive area.

Some of the less extensive valleys of England and Wales are enumerated in the subjoined list. These form part, in several instances, of the larger tracts of ground already noticed:—

Vale of Aylesbury, in Buckinghamshire.
Vale of Blackmore, in Dorsetshire.
Vale of Berkeley, in Gloucestershire.
Borrowdale, in Cumberland.
Vale of Catmoss, in Rutlandshire.
Vale of Cleveland, in Yorkshire.
Dovedale, in Staffordshire and Derbyshire.
Vale of Evesham, in Worcestershire.
Vale of Gloucester, in Gloucestershire.
Vale of Llanberris, in Caernarvonshire.
Vale of Llangollen, in Denbighshire.
Vale of Lorton, in Cumberland.
Vale of Pewsey, in Wiltshire.
Vale of Pickering, in Yorkshire.
Vale of Red Horse, in Warwickshire.
Ribblesdale, in Yorkshire and Lancashire.
Swaledale, in Yorkshire.
Vale of St. John, in Cumberland.
Vale of Taunton, in Somerset.
Teesdale, in Durham and Yorkshire.
Vale of Wardour, in Wiltshire.
Weardale, in Durham.
Wensleydale, in Yorkshire.
Vale of White Horse, in Berkshire.
Vale of Worcester, in Worcestershire.

Islands:—The islands which adjoin the coasts of England and Wales are much less numerous than those belonging to North Britain. Several of them lie so nearly adjacent to the mainland as almost to form a portion of it, and their insularity is scarcely noticeable upon an ordinary map, unless of large scale. This is not the case, however, with Man, Anglesey, and Wight, the three largest of the number; nor with the group of the Scilly Islands, at the mouth of the Channel. In some instances, as in the Isle of Thanet, now only divided from the mainland of Kent by the river

Stour and a narrow offset by that stream, the division was formerly much more complete than is at present the case.

The Isle of Man is situated in the Irish Sea, nearly equidistant between the three divisions of the United Kingdom — England, Scotland, and Ireland. It is, however, rather nearer to the Scotch than to the English coast. Man is now reckoned to England, though not belonging to either of the English counties, nor having any direct representation in the Imperial parliament. Long a distinct kingdom, it has still some peculiar political privileges.

The northern extremity of the Isle of Man is distant 30 miles (in direct measure) from St. Bees Head, on the coast of Cumberland. From Burrow Head, on the coast of Wigtown, Scotland, it is 18 miles distant, and from the Mull of Galloway 25 miles. The Isle of Man measures 30 miles in its greatest length, and has an average breadth of about 10 miles; its area is 220 square miles (56,980 hectares). The interior of this island is high, a range of hills running through it in a NE. and SW. direction; the most elevated summit, called Sneafield, nearly in its centre, is 2,004 feet in height. Its extreme northern portion is low, and consists of tertiary formations. Owing to the central position of this island, all the different portions of the British Archipelago, — Ireland, Scotland, England, and Wales, — can be seen from its hills in clear weather.

The Isle of Man is rich in its mineral productions, which embrace lead, copper, silver, iron, and manganese, as well as good slate and building stone. The lead ore is that chiefly worked, and copper, iron, and tin, to a smaller extent. Of the total area of the island, about 140 square miles are fit for tillage, the remainder consisting of hill, common, and waste land. The Calf of Man is a small rocky island off the south-west extremity of the larger island: some sheep are reared, and turnips grown, on its surface.

The Isle of Anglesey (with Holyhead Island, which adjoins it on the west) forms one of the Welsh counties. Anglesey is separated from the mainland by the Menai Strait: it measures 20 miles in length from north to south, and 22 miles from east to west; and, including the adjacent island of Holyhead, has an area of 302 square miles (78,218 hectares). The surface of Anglesey is generally level, with a few gentle risings: in the northern part, the Parys Mountain reaches 473 feet in height. The whole island is rich in mineral productions, and copper ore is found within a few feet of the surface, forming, in some places, a mass or bed of considerable thickness. In the Parys mountain, both copper and lead ores are abundant, and also sulphate of copper and native sulphur. In the eastern half of the island there is a small but productive coal-field.

Holyhead Island (on which is the town of Holyhead) is elevated in its north-western part, the highest point being more than 700 feet above the sea-level. It is united to Anglesey by two long embankments, over which the coach-road, and also the line of the Chester and Holyhead railway, are carried.

The Isle of Wight lies in the English Channel, off the southern coast of England, from which it is divided by the channel called the Solent. This channel measures, in its narrower portion to the westward, about 3 miles across: its eastern and broader part, which is known as Spithead, is above 4 miles wide.

The Isle of Wight measures 23 miles in its extreme dimensions east and west, and 13 miles from north to south. Its superficial area is 135 square miles (34,965 hectares). Its surface is beautifully diversified with hill and dale, the higher points of the land, in the centre and south of the island, reaching altitudes of above seven and eight hundred feet.*

* See *ante*, p. 34.

The Isle of Wight possesses great diversity of geological formation. The northern half belongs to the clay basin of the opposite coast: the middle and south of the island consist principally of cretaceous rocks, divided by a narrow band of Wealden sand. The chalk of the Isle of Wight extends in a direct line through the greatest length of the island, from Culver Cliff, nearly at its eastern extremity, to Freshwater Bay, at its opposite extreme. The well-known rocks called "the Needles" are the westernmost extremity of the chalk.

The smaller islets adjoining the English coast are:—

On the east, within the German Ocean.

Holy-Island, or *Lindisfarne*, the little group of the *Fern Islands*, and the small island of *Coquet*; all belonging to Northumberland. Lindisfarne is joined to the mainland, at low water, by a broad expanse of sand. It measures nine miles in circumference, and contains 1,020 acres (about $1\frac{3}{4}$ square miles). The soil of one half the island is little better than sand, and is stocked with rabbits: the other half is under cultivation. The Fern group includes seventeen rocky islets. Coquet Island lies off the mouth of a river of the same name.

Mersea, *Wallsea*, *Foulness*, and *Canvey Islands*, all of which form part of the Essex coast, and are only divided from the mainland by narrow creeks. All these islands are low and flat; they possess a fertile soil. Canvey is within the estuary of the Thames: the others line the coast between Shoebury Ness and the mouth of the river Colne.

Thanet and Sheppey, both of which belong to Kent. The eastern extremity of Thanet is the promontory of the North Foreland, formed by the chalk cliffs which line this portion of the coast. The Isle of Thanet has an area of about 40 square miles. The main channel of the river Stour bounds it on the south: a branch of this river — now a mere ditch, but formerly a wide stream, known as the river Wantsum — forms its western limit. This,

stream was anciently wide enough to admit the passage of large vessels.

Sheppey adjoins the estuary of the Medway; it is divided from the mainland by the principal channel of that river on the west, and by a branch of it, called the East Swale, upon the south. Sheppey is 9 miles long by 3 broad, and has an area of about 33 square miles. It is of tertiary formation. The cliffs on its north coast abound in pyrites, from which copperas is extracted. The south part of the island is low and marshy.

On the south coast, within the English Channel.

Portsea, Hayling, and Thorney Islands, off the coast of Hampshire, and nearly fronting the eastern division of the Isle of Wight. These are formed by arms of the sea which indent the coast of the mainland, and penetrate for some miles into the interior. The bay to the west of Portsea Island forms Portsmouth Harbour; that to the east (between Portsea and Hayling Islands) is Langston Harbour. East of Hayling is Chichester Harbour.

Portsea Island has the town of Portsmouth at its south-western extremity: it is only divided from the mainland by a narrow creek. The channel which divides Hayling Island from the mainland is (at high water) nearly half a mile across. Portsea and Hayling Islands front the open waters of the Channel. Thorney Island, which is of smaller size, is enclosed within the estuary which limits Hayling Island on the east.

Purbeck and Portland Islands are portions of the Dorsetshire coast. Both are in reality peninsulas. The Isle of Portland (the termination of which forms Portland Bill) is connected with the mainland by a singular ridge of shingle, 10 miles long, composed of loose rounded stones, and known as the Chesil Bank.

Drake's Island is a bold rock, within the broader portion of Plymouth Sound.

The Eddystone (on which is a well-known lighthouse) is

a rock lying SW. from Plymouth Sound, and distant 9 miles from the entrance of that estuary.

On the west, within the Irish Sea and the Atlantic Ocean.

Walney, and a few smaller adjacent inlets, lie near the coast of Furness (Lancashire), off the west side of Morecambe Bay. Walney is 8 miles long by less than half a mile broad: it consists of moss or peat, and is so low as to be at times nearly inundated by the tide. *Old Barrow Island*, *Peel Island*, *Foulney Island*, and a few of still smaller size, are situated between Walney and the mainland.

Bardsey Island, nearly 2 miles long, is off the south-western extremity of Caernarvonshire, near the headland of Braich-y-Pwll. A short distance to the eastward is the little group of *St. Tudwall's Islands*.

Ramsey Island is off the coast of Pembrokeshire, upon the north side of the entrance of St. Bride's Bay. *Skomer* and *Skokham Islands*, with *Grasholm*, are on the southern side of the same bay, near St. Anne's Head.

Caldy Island is off the western entrance of Caermarthen Bay, near the coast of Pembrokeshire.

Lundy Island is off the coast of Devon, upon the south side of the broader portion of the Bristol Channel, and 11 miles distant from Hartland Point. It is a mass of granite, 2 miles long, and rising 200 feet above the sea.

The Scilly Islands, a numerous group of islets and rocks, lie 30 miles distant from the Land's End, and to the SW. of that promontory. They have together an area of about 4,000 acres (between 6 and 7 square miles). St. Mary, the largest of the group, is about 8 miles in circumference. Only six of the group are inhabited: the crops grown are potatoes, barley, peas, and oats. Cattle are reared on the islands, and many of the people are engaged in fishing.

Rivers.—Most of the larger rivers of Britain discharge

into the North Sea, on the east side of the island. This results from the fact of the higher grounds being found principally in the neighbourhood of the western coast. The general slope of the whole island is directed from west to east. An important exception to this truth is presented in the case of the Severn, which is second in length amongst the rivers of Britain, and is one of the most considerable in the area of its basin. The Severn, however, has at first an eastwardly course, and rounds the mountain-region of Wales before it turns towards the western sea. Of other exceptions, the two most noteworthy are the Mersey, in South Britain, and the Clyde, in the northern division of the island. These, however, though of the highest importance in a commercial point of view, are inferior to many other streams in length.

In the north of England, the watershed between the river-basins of the opposite seas is formed by ground of considerable elevation, and coincides with the principal axis of the Pennine chain. But in the central, southern, and eastern parts, the watersheds are of trifling height, and can sometimes only be traced with difficulty, the head-waters of the opposite streams frequently approaching within a short distance of one another. Neither the ranges of the Chiltern Hills, nor those of the North and South Downs, form lines of watershed, but are broken through by numerous river-valleys. The entire drainage of the Welsh mountain system belongs to the western seas, the waters of the longer slope flowing to the SE. and NE. by the valleys of the Severn and the Dee, and those of the shorter and more rapid declivity into Cardigan Bay and the western extremity of the Bristol Channel.

The principal rivers of England and Wales, commencing on the east coast, from north to south, and proceeding round the island, are the following:—

On the east side, the *Aln*, the *Coquet*, the *Wansbeck*, the *Blyth*, the *Tyne*, the *Wear*, the *Tees*, the *Esk*, the *Humber* (the last formed by the junction of the Ouse and

Trent): the *Witham*, the *Welland*, the *Nen*, and the *Great Ouse*, all of which flow into the estuary of the Wash; the *Yare*, the *Blythe*, the *Alde*, the *Deben*, the *Orwell*, the *Stour*, the *Colne*, the *Blackwater*, and the *Crouch*; the *Thames*, which forms at its mouth a broad estuary, and receives the waters of the *Medway*; and another river *Stour*, which flows through the county of Kent, and enters the sea on the coast intervening between the North and South Forelands. All of these rivers flow into the German Ocean, or North Sea.

On the south coast the rivers have mostly short courses: amongst them are the *Rother*, the *Ouse* (of Sussex), the *Adur*, the *Arun*, the *Itchin*, the *Anton*, the *Avon* (of Salisbury), the *Stour* (of Dorsetshire), the *Frome*, the *Axe*, the *Otter*, the *Ex*, the *Teign*, the *Dart*, the *Plym*, the *Tavy*, the *Tamar*, the *Fowey*, and the *Fal*. The three most considerable amongst them are the Salisbury Avon, the Ex, and the Tamar. All the rivers of the south coast flow into the English Channel.

On the west side the *Camel* (or *Alan*) flows into the Atlantic Ocean; the *Torridge* and the *Tawe* into Barnstaple Bay; the *Parret*, the Bristol *Avon*, the *Severn*, the *Wye*, the *Usk*, and the *Taff*, into the upper portion of the Bristol Channel; the *Neath* and the *Tawe*, into Swansea Bay; the *Towy*, into Caermarthen Bay; the *Teify*, into Cardigan Bay; the *Conway*, the *Dee*, the *Mersey*, the *Ribble*, the *Lune*, the *Kent*, the *Duddon*, and the *Derwent*, into the Irish Sea; the *Eden*, into the head of the Solway Firth.

Besides the above, there are a great number of smaller streams, by which every part of the island is watered: these may be best learnt by attentive study of the Map.

The following Tables show the lengths and areas of drainage of the principal rivers of England and Wales, with the names of their chief tributaries, extent of navigation, and other particulars:

Rivers flowing into the German Ocean.

	Length in Miles	Area of Basin in sq. Eng. Miles	Extent of Navigation, &c.
Tyne	73	1100	Navigable to Newburn, five miles above Newcastle.
Wear	70	460	Navigable to Durham.
Tees	95	744	Navigable to Stockton.
Humber { Ouse / Trent	150 / 180	9550	The Ouse is formed by the confluence of the Swale and Yore, or Ure: the Swale is navigable to Morton Bridge, near Topcliffe; and the Ure to Ripon. The Ouse afterwards receives the Nidd, the Wharfe, the Derwent, the Aire (navigable to Leeds), and the Don (navigable to a few miles below Sheffield). The Calder, a considerable tributary of the Aire, is navigable to Wakefield. The Trent is navigable to Burton; its principal tributaries are, on the left bank, the Dove and the Derwent (navigable to Derby), — and on the right, the Tame, and the Soar (navigable to Leicester).
Witham	89	1050	Navigable to Lincoln.
Welland	72	708	Navigable to Stamford.
Nen	99	1155	Navigable to Northampton.
Ouse (Great)	156	2960	Navigable to Bedford.
Yare	70	1180	The longest branch of the Yare is called the Wensum, and is navigable to Norwich, a little below which town it joins the proper stream of the Yare. A short distance above its mouth, the Yare passes through the small lake of Breydon Water, at the head of which it is joined by the river Waveney, navigable to Bungay.

	Length in Miles	Area of Basin in sq. Eng. Miles	Extent of Navigation, &c.
Stour (*Essex*)	62	430	The Stour is navigable to Sudbury; for some miles above its mouth it forms a considerable estuary, at the entrance of which it is joined by the Orwell, the river upon which Ipswich stands. The Orwell is navigable to Stowmarket; above Ipswich it is called the Gipping.
Colne	38	200	Navigable to Colchester, which is also the limit of the tide-water.
Blackwater	50	465	The Blackwater is called in its upper course the Pant. The last 10 miles of its course form a tidal estuary. At Maldon, immediately above the head of the estuary, the Blackwater is joined by the Chelmer, which has a length of 37 miles above the junction. The Chelmer is navigable to Chelmsford.
Thames	215	6160	The upper part of the Thames is called the Isis: its chief affluents are the Cherwell, Thame, Colne, and Lea, on the *left* bank; and the Kennet, Wey, Mole, Darent, and Medway on the *right*. The main stream of the Thames is navigable to Lechlade, 205 miles above its mouth. The Medway, which joins the Thames near its mouth, is 60 miles in length, and is navigable to Penshurst: by a branch called the East Swale, it encircles the Isle of Sheppey. The tide-water of the Thames reaches as far as Teddington, 19 miles above London Bridge, and 3 miles above Richmond.
Stour (*Kent*)	53	310	Navigable to Canterbury: a branch thrown off to the left, near its mouth, forms, with the main stream, the Isle of Thanet.

Rivers flowing into the Bristol Channel.

	Length in Miles	Area of Basin in sq. Eng. Miles.	Extent of Navigation, &c.
Parret	40	560	The Parret is joined on its right bank by the Yeo, navigable to Ilchester; and on the left bank by the Tone, navigable to Taunton.
Avon (*of Bristol*)	78	900	Navigable to Bath.
Severn	200	4500	The Severn rises on Plinlimmon, among the mountains of Wales, and begins to be navigable at Welshpool, 163 miles above its mouth. Its chief tributary on the right is the Teme, which joins it below Worcester: on the left bank it is joined by the Virnwy (on the borders of Wales), the Tern (below Shrewsbury), the Stour (at Stourport), and the Avon (at Tewkesbury). The Avon has its origin in the central plain of England, near the sources of the Welland and the Nen; it has a length of 99 miles, and is navigable to Stratford. Steam-boats ascend the Severn to Gloucester, which is also the limit of the tide-water.
Wye	148	1650	The Wye rises on the SE. slope of Plinlimmon, only a mile distant from the source of the Severn, and is remarkable for the beauty of the scenery in the lower part of its course; it is navigable to Hay, on the borders of Wales.
Usk	76	650	The Usk rises on the northern slope of the Caermarthenshire Beacons, in the range of the Black Mountains, the highest ground of South Wales: it is navigable only to Newport, a few miles above its mouth.
Towy	67	520	The tide ascends this stream to above Caermarthen.

Rivers flowing into the English Channel.

	Length in Miles	Area of Basin in sq. Eng. Miles	Extent of Navigation, &c.
Ouse	36	188	Navigable to near Cuckfield.
Arun	51	315	Navigable to Houghton Bridge, 15 miles above its mouth.
Anton or Test	35	460	The Anton falls into the head of the estuary called Southampton Water, which also receives the Itchin, on which Winchester stands.
Avon (of Salisbury)	70	1210	Navigable to Salisbury: near its mouth it is joined by the Stour, which flows past Blandford and Wimborne Minster, and has a course of 64 miles.
Frome	43	330	This river forms at its mouth the inlet of Poole Harbour. It is not navigable above Wareham.
Ex	58	562	Navigable to Topsham, near Exeter.
Tamar	55	600	Navigable to near Launceston: the Tamar enters the estuary of Plymouth Sound, above which it is joined on the left bank by the river Tavy. The Plym enters the same estuary.

Rivers flowing into the Irish Sea.

	Length in Miles	Area of Basin in sq. Eng. Miles	Extent of Navigation, &c.
Teify	70	400	Navigable to about 5 miles above Cardigan.
Dee	93	850	The Dee flows from Lake Bala, the largest lake in Wales: its estuary becomes at low water a mere muddy expanse, through which the channel of the river preserves an insignificant course. The Dee is navigable to Chester, to which place the tide ascends.

	Length in Miles	Area of Basin in sq. Eng. Miles	Extent of Navigation, &c.
Mersey	68	1706	The Mersey is formed by the union of the Goyt and Etherow, both of which flow from the high grounds of the Pennine chain: at its mouth it expands into a magnificent estuary, navigable for vessels of the largest size. On the right bank it receives the Tame and the Irwell; on the left side, at the head of the estuary, it is joined by the Weaver, which flows through the Cheshire plain, and is remarkable for the deposits of rock-salt, and the brine-springs, occurring in the district which it waters. The tide ascends the Mersey to Warrington.
Ribble	60	750	Navigable to Preston.
Lune	53	430	Navigable to Lancaster.
Kent	28	196	
Duddon	27	117	
Derwent	35	260	The Derwent carries to the sea the surplus waters of several of the lakes belonging to the Cumbrian mountain region. The drainage of the high valley of Borrowdale is received into the lake of Derwent, whence the river flows into Bassenthwaite Lake. After leaving this, the Derwent receives at Cockermouth the waters of the Cocker, which is the outlet of the lakes of Crummock, Buttermere, and Lowes Water. The Greta, which joins the Derwent near the foot of Derwent Water, brings with it the waters of Thirlemere. The Derwent is only navigable for a mile above its mouth, which forms the harbour of Workington.
Eden	80	995	Navigable to Carlisle.

It hence appears that the great estuaries formed by the Humber, the Wash, and the mouth of the Thames, on the *east* coast, and the upper part of the Bristol Channel on the *west*, receive the greater part of the running waters of the island. The united area of the river-basins of the Wash (including the Witham, Welland, Nen, and Ouse) is 5,833 square miles; and of the Severn, the Bristol Avon, the Wye, and the Usk, jointly 7,700 miles: if we add to these the areas of the Humber and the Thames drainage, we have a total of 29,243 square miles, or half the superficial extent of England and Wales.

LAKES.—The only part of England in which lakes are numerous is the group of the Cumbrian Mountains. The largest of them, Windermere, is eleven miles in length and one mile in breadth; Ulleswater, the next in magnitude, is eight miles long and about three-quarters of a mile broad; and Coniston, the third in dimensions, has a length of five and a half miles and an average breadth of half a mile.

The smaller lakes found in the same region are Wast Water, Ennerdale, Buttermere, Crummock, Lowes Water, Derwent Water, Bassenthwaite, and Thirlemere,—all situated on the W. and NW. slopes of the mountain tract: Hawes Water, which (as well as Ulleswater) lies on the NE. side of the mountains; Rydal Water, Grassmere, and Esthwaite Water, in the valleys opening towards the south, which is also the direction of Windermere and Coniston. Nearly all of these are long and narrow, or else oval-shaped, bodies of water.

The principal lakes of the Cumbrian mountain region are exhibited in the following Table, with their dimensions, elevation above the sea-level, and the names of the streams by which their waters are carried off to the sea.

	Length	Breadth	Elevation	
	Miles	Miles	Feet	
Windermere	11	1	134	Discharged by the river Leven into Morecambe Bay.
Rydal Water	¾	⅛		Flows into Windermere, by river Rothay.
Grassmere	1	¾	208	Connected with Rydal Water by a small stream.
Esthwaite Water	2	½	217	Flows into Windermere, by a stream called Cunsey Beck.
Coniston	5½	½	147	Flows by river Crake into Morecambe Bay, entering the estuary formed at the mouth of the Leven.
Wast Water	3¼	½	204	Connected with the Irish Sea by the river Irt.
Ennerdale	3	½	369	United with the Irish Sea by the river Ehen.
Buttermere	1¼	⅛	331	Flows by a small stream into Crummock Water.
Crummock	3	½	321	Discharged by river Cocker into the river Derwent.
Lowes Water	1¼	⅛	429	Connected by a small stream with Crummock Water.
Derwent Water	3	1¼	238	Connected with Bassenthwaite Lake by the river Derwent.
Bassenthwaite	4	¾	226	Discharges by river Derwent into the Irish Sea.
Thirlemere	2½	¼	533	A stream called St. John's Beck flows from Thirlemere into the river Greta, which joins the Derwent at the foot of Derwent Water.
Ulleswater	8	¾	477	Discharges by the river Eamont into the channel of the Eden.
Hawes Water	2½	⅛	694	Connected with the Eamont by the river Lowther.

There are also many of smaller dimensions than the above, some of them locally distinguished as *tarns*: many of these are situated at great elevations among the mountains. Windermere is in some parts 240 feet deep, and exceeds any of the others in depth, excepting Wast Water, which is 270 feet in its deepest part. The greatest depth of Ulleswater is 210 feet.

Numerous waterfalls occur in the lake district: the principal are *Scale Force*, beside Crummock Water, 190 feet high; Barrow waterfall, 124 feet, and Lowdore waterfall, 100 feet, both on the east side of Derwent Water. The river Tees forms a fine waterfall (called *Mickle Force*, 69 ft. descent) in the upper part of its course; and there are also falls in the Ure and other rivers which have their origin in the high districts of the Pennine mountain-chain. Several small cascades occur in the hilly parts of Devonshire.

The largest lake in Wales is the *Lake of Bala*, or *Llyn Tegid*, out of which the river Dee flows: it is four miles long and about two-thirds of a mile broad, and has an average depth of 40 feet. *Llyn Conway*, the source of the river Conway, is one mile long by three-quarters of a mile broad. The *Lakes of Llanberris*, on the NW. side of the Snowdon group of mountains, consist of an upper and a lower lake, of which the former is one mile long and half a mile broad, and the latter one and a half mile long, but very narrow. The upper lake is more than 400 feet deep. The lakes of Llanberris are distinguished for the beauty of their scenery; their water flows by the river Seiont into the Menai Strait. Lakes are not generally numerous in the Welsh mountains, and most of those which occur are of small size.

The largest lake in South Wales is *Llyn Safaddu*, or *Brecknock Mere* (to the SE. of the town of Brecknock), about three miles long by one broad, and not more than 10 or 12 feet in average depth. It is situated in a comparatively low and level district.

Numerous waterfalls occur among the Welsh mountains, especially in the counties of Caernarvon, Merioneth, Montgomery, and Cardigan, which embrace the most varied and romantic scenery of the principality. The *Glassllyn Cascade*, among the Snowdon group, has a fall of 300 ft.; among the most celebrated, however, are the falls of the little river *Mynach* (which joins the stream of the Rheidol, falling into Cardigan Bay), at a spot called the Devil's Bridge, the scenery around which is in the highest degree attractive.

FORESTS.—England has few forests of any considerable extent in the present day, and the woodland districts bear but a small proportion to the whole extent of the country. The increasing demand for timber, and the growing extension of cultivation, have long since led to the disforestment of large tracts of country once thickly covered with wood.

The following are among the most extensive forests in the present day: —

New Forest, in Hampshire.
Alice Holt Forest, in Hampshire.
Woolmer Forest, in Hampshire.
Bere Forest, in Hampshire.
Dean Forest, in Gloucestershire.
Whittlebury Forest, in Northamptonshire.
Wychwood Forest, in Oxfordshire.
Salcey Forest, in Northamptonshire.
Sherwood Forest, in Nottinghamshire.
Delamere Forest, in Cheshire.
Hainault (or Waltham) Forest, in Essex.
Epping Forest, in Essex.
Windsor Forest, in Berkshire.

Many tracts besides the above retain the name of Forest, though now in great measure cleared of timber, and in some instances wholly so.* Among such are: —

Rothbury Forest, in Northumberland.
Inglewood Forest, in Cumberland.
Martindale Forest, in Westmoreland.
Lune Forest, in Yorkshire.
Stainmoor Forest, in Yorkshire.
Bowland Forest, in Yorkshire.
Wyredale Forest, in Lancashire.
Needwood Forest, in Staffordshire.
Cannock Chase, in Staffordshire.
Clun Forest, in Shropshire.
Charnwood Forest, in Leicestershire.
Forest of Wyre, in Worcestershire.
Forest of Arden, in Warwickshire.
Rockingham Forest, in Northamptonshire.
Enfield Chase, in Middlesex.
St. Leonard's Forest, in Sussex.
Tilgate Forest, in Sussex.

* In the case of many of the tracts enumerated above, there is no doubt that the progress of enclosure and cultivation has gradually stripped of their timber extensive districts which, within a comparatively recent period, were covered with wood. But with several of the so-called "forests," this can hardly have been the case: as, for example, with Dartmoor, the high and exposed surface of which must (within the present geological epoch) always have been fatal to the growth of trees, as it is in the present day. The moor itself, however, is everywhere surrounded by wooded tracts, and we may suppose that, in this and similar instances, the appellation of "forest," applied by the earlier inhabitants of the adjacent district to the surrounding belt of forest country, became in time extended to the region which it enclosed.

Ashdown Forest, in Sussex.	Selwood Forest, in Wilts.
Savernake Forest, in Wiltshire.	Exmoor Forest, in Somerset and Devon.
Cranborne Chase, in Wilts and Dorset.	Dartmoor Forest, in Devon.

GEOLOGY AND MINERALS. — The mineral characteristics of various parts of England have been already noticed, in connection with their physical aspect. It is unnecessary for our purpose to do more than sketch the general outlines of its geology.

With few exceptions, the whole of England and Wales is composed, geologically speaking, of sedimentary or fossiliferous rocks. These are of various ages, and exhibit widely different mineral characters, as well as fossil remains of equal or even greater diversity. Speaking generally, the formations of later date (tertiary and recent) are found on the eastern side of the island, and the series of rocks succeed one another, in the descending order, from east to west. The rocks of the western coast belong principally to the older members of the stratified formations.

A section drawn from the coast of Suffolk to the Land's End exhibits in succession the following formations: —

1. Drift, and various recent deposits	Post-tertiary.
2. Crag (i.e. various shelly gravels and sands)	Tertiary.
3. London clay	
4. Chalk	Cretaceous.
5. Green sand	
6. Oolitic limestones and various clays	Oolitic system.
7. Lias limestone	
8. New red sandstone	Triassic system.
9. Carboniferous limestone	Carboniferous system.
10. Old red sandstone	Devonian system.
11. Granite and other rocks of igneous origin.	

With the exception of the last-mentioned, all the above series of rocks are of aqueous deposit, and have imbedded within them the fossil remains of former life, vegetable and animal.

A line drawn across England in the direction of south-east and north-west, from Dungeness (Kent) to the Solway Firth, intersects the following formations:—

1. Drift, or post-tertiary (Kent: Romney Marsh).
2. Wealden sand (Kent and Sussex).
3. Chalk and other members of the cretaceous series (Kent: Surrey).
4. London clay (Surrey: Middlesex).
5. Chalk and green sand (Hertford: Buckingham).
6. Oolitic limestones and lias (Bedford: Northampton: Leicester).
7. New red sandstone (Leicester: Nottingham: Stafford: Cheshire).
8. Magnesian limestone (Nottingham: Derby).
9. Coal-measures (Nottingham: Derby: York: Lancashire).
10. Millstone-grit (Yorkshire).
11. Carboniferous limestone (Yorkshire: Lancashire).
12. Silurian rocks (Westmoreland: Cumberland).

The general sequence of the successive formations, it will be seen, is in either case the same. The *Wealden* group (which occurs principally within the south-eastern division of the island, interposed between the chalk ranges of the North and South Downs), the *magnesian limestone* (a narrow belt, confined to the northern and north-midland counties), and the *Silurian rocks* (most abundantly represented in Wales, whence their designation is derived, but also represented in the mountain group of Cumberland and Westmoreland), occurring in the case of the latter section, while they are wanting in the former instance.

It is only by study of the geological map of Britain that a clear conception of the distribution and relative area of the various strata can be obtained. The following summary may, however, be useful.

The Alluvial deposits occur chiefly along the estuaries of the Trent, Severn, Thames, and other rivers, and comprehend the district of the Fens, and the low tract of Brent Marsh, in Somersetshire.

The Crag and Freshwater formations occur on the coast

of Norfolk, Suffolk, and Essex, and in the northern part of the Isle of Wight.

The London and plastic Clays form two great basins, enclosed by the chalk formations: one of these extends from the south-western part of Berkshire eastward to the shores of Essex and Suffolk, including the lower Thames and its tributaries. The other occupies the southern part of Hampshire and portions of the adjacent counties on either hand. On the borders of Surrey and Berkshire, and also in some other places, the London clay is overlaid by a formation called the Bagshot sand, which consists of siliceous sand and sandstone.

The Cretaceous formations (chalk and green-sand) consist of two portions — the smaller of which embraces the Wolds of Yorkshire and Lincolnshire. The larger extends from the coast of Norfolk, in a SW. direction, across the basin of the Thames, to the shores of the English Channel, and in the neighbourhood of Salisbury Plain and the north of Hampshire throws off to the eastward the two great lines of the North and South Downs. It also extends through the centre of the Isle of Wight. The chalk is the most extensive of the British strata, and occupies portions of all the eastern, and many of the southern and south-midland counties.

The Wealden formation is chiefly confined to the district of the Weald, and to a small portion of the Isle of Purbeck and the southern shores of the Isle of Wight.

The Oolitic formations form a broad belt which stretches in a general NE. and SW. direction through the central parts of England; beginning on the coast of Yorkshire, they extend thence, through the midland counties, to the shores of the Channel in the western portion of Dorsetshire. The *lias* rocks are throughout situated to the westward of the proper oolites.

The New Red Sandstone commences on the coast of Durham, and extends over the lower part of the Tees basin, and along the course of the Swale, the Yorkshire

Ouse, and the river Trent: it occupies the greater part of the Trent basin, and stretches thence into the Cheshire plain, embracing the valley of the river Weaver; some smaller and partly detached portions extend southward to the shores of Devonshire, near the mouth of the Ex. There is also a considerable detached portion which embraces the valley of the river Eden and the shores of the Solway Firth.

The Magnesian Limestone is a narrow belt which stretches through the county of York, and along the borders of Nottingham and Derby; there is also a detached portion in the eastern part of Durham.

The Carboniferous formations occupy a great part of the northern counties, embracing the whole region of the Pennine chain, and the western portion of the York plain, besides numerous detached portions in North and South Wales, and several of the midland, western, and southern counties. (The coal-fields are subsequently enumerated.)

The Devonian rocks (including the old red sandstone) are extensively developed in the west and south-west of England, and in the counties of Brecon, Caermarthen, and Pembroke, in South Wales.

The Silurian and *Cambrian rocks* occupy the greater part of Wales, and also the higher regions of the Cumbrian mountain group. They likewise form the principal rock in the Isle of Man.

Granite, porphyry, serpentine, and other rocks of plutonic or igneous origin, are sparingly developed in England and Wales. They cover, however, large spaces in the northern division of the island. In England, granite occurs most extensively within the counties of Devon and Cornwall.

Of the mineral productions of Britain, *coal* is unquestionably the most important. Seventeen distinct coal-fields are found within England and Wales, all of them worked to more or less advantage. These are —.

	Area
1. Anglesey (North Wales)	9 square miles
2. Bristol and Somerset	45 " "
3. Coalbrook Dale (Shropshire, adjoining the Severn)	28 " "
4. Cumberland, or Whitehaven	25 " "
5. Denbighshire (North Wales)	47 " "
6. Derby and York (West Riding)	760 " "
7. Durham and Northumberland (Newcastle)	460 " "
8. Flintshire (North Wales)	35 " "
9. Forest of Dean (Gloucestershire, west of the Severn)	34 " "
10. Forest of Wyre (Worcestershire)	" "
11. Lancashire (South Lancashire and Cheshire)	217 " "
12. Leicestershire (near Ashby-de-la-Zouch)	15 " "
13. North Staffordshire (Pottery district)	75 " "
14. South Staffordshire (Birmingham and Wolverhampton)	93 " "
15. Shrewsbury (Shropshire)	" "
16. South Wales (Monmouth to Pembroke)	906 " "
17. Warwickshire (near Coventry)	30 " "
Total area	2779 " "

The coal-fields of South Wales, Lancashire, Derby and York, Durham and Northumberland, and South Staffordshire, are by much the most productive of the above.

The value of the coal-fields of Britain is greatly enhanced by the fact that iron ore occurs nearly everywhere in close proximity to the coal-measures. Coal, iron ore, and lime — the last necessary as a flux or medium for the purposes of the smelter — are placed by nature in juxtaposition, and the processes of man's industry thereby greatly facilitated.

Iron.—The localities in which iron is most extensively made are South Wales, Staffordshire, Shropshire, Yorkshire, Durham, Derbyshire, North Wales, Cumberland, and the south-east portion of Northumberland. Of the total quantity produced, the South Wales coal-field supplies above a third. Iron-sand is abundant in the weald of

Sussex and Kent, and iron was formerly extensively worked in that district; but the superior advantages possessed by the coal districts, in the immediate proximity of the fuel required for smelting the ore, have caused the iron-works in this locality to be long since abandoned.

Copper is most abundant in Cornwall, and also occurs in Devonshire, the Isle of Anglesey, and Staffordshire. All the Cornish copper ore is carried to Swansea to be smelted.

Lead occurs chiefly in Derbyshire, Northumberland, Cumberland, North Wales (in the counties of Flint and Denbigh), in South Wales, and in Devonshire. *Zinc* is also obtained from the sulphuret of zinc associated with the lead, but is most extensively obtained from calamine, its proper ore, mines of which are worked in Derbyshire.

Tin occurs almost exclusively in Cornwall, where this metal has been worked from the earliest ages. Tin mines, properly so called, are found only in Cornwall, the greater number of them within the south-western portion of the county, to the west and south of Truro. Stream-tin — i.e. tin obtained by washings in the beds of streams, in which particles of the metal occur, intermixed with the alluvium — is derived also from Cornwall, and from a few localities elsewhere, chiefly within South Wales (Glamorganshire) and the adjacent county of Monmouth. The tin thus obtained is known as grain tin. The principal stream-works, however, are situated on or near the south coast of Cornwall, and the greater number within the parishes of St. Austell and Luxullian. The valleys of Dartmoor, long deserted by the miner, are everywhere scored by the remains of ancient stream-works.

A small quantity of *silver*, chiefly extracted from the lead ore, is found in the counties of Cumberland, Derby, and Flint: its produce is, however, too small to be of any commercial importance.

Salt occurs chiefly in the county of Cheshire, in the valley of the river Weaver, already mentioned. Brine-springs also occur at Droitwich, in Worcestershire, and at

some places in the county of Durham. All of these are within the new red sandstone formation.

Limestone is abundant in almost every part of England and Wales. The best kinds of *building-stone* are obtained from a narrow belt of the magnesian limestone formation, which extends from north to south through the counties of York, Nottingham, and Derby, and is quarried in numerous places. Stone of excellent quality is also worked in the Isle of Portland (in the south of Dorsetshire); the strata here consist of the various members of the oolitic series, the different beds of which are extensively quarried in many other localities. *Slate* is chiefly obtained in the regions of the Cumbrian and Welsh mountains.

Mineral Springs.—Springs impregnated with saline compounds occur at Epsom (in the county of *Surrey*); at Cheltenham, and Clifton, near Bristol (in *Gloucestershire*); at Bath (*Somerset*); Leamington (*Warwick*); and Buxton and Matlock (both in *Derbyshire*).

Chalybeate waters, that is, springs impregnated with iron, are found at Tunbridge-Wells (*Kent*), Brighton (*Sussex*), Cheltenham (*Gloucester*), Great Malvern (*Worcester*), Harrowgate and Scarborough (*Yorkshire*), Hartlepool (*Durham*), Aberystwith (*Cardiganshire*), and elsewhere. The waters at Harrowgate, Cheltenham, and Leamington, are also partly sulphureous.

The only warm springs which occur in England are at Bath, Clifton (near Bristol); and at Buxton, Bakewell, Stoney Middleton, and Matlock, all in Derbyshire. The highest temperature of the Bath waters is 117°, of those at Clifton 74°, Buxton 82°, and Matlock about 69°. Near Cardiff, in the county of Glamorgan (South Wales), is a warm spring, the temperature of which is 21° above that of the place, and which contains saline ingredients.

CHAPTER III.

ROMAN BRITAIN.

THE Romans, under Julius Cæsar, first visited Britain in the year 55 B.C. The Roman conquest of Britain commenced under the Emperor Claudius, A.D. 43, and the Romans remained masters of the larger part of the island during nearly the ensuing four centuries, until 420 A.D., when the soldiers of Rome were finally withdrawn and the Britons left to themselves. Roman sovereignty in Britain lasted therefore during a period much longer than has elapsed from the time of the Protestant Reformation to the present day. During this lengthened term of dominion in our island the Romans constructed roads, built cities, and erected many public and private works (military and otherwise), the remains of which, even at the present day, attest their skill and power. A brief notice of some of those points in which the geography of Britain during the Roman period differed from its geography in the present day will not be without utility to the student of history and geography alike.

COAST-LINE.—The coast-line of Britain has undoubtedly undergone considerable alteration since the time when the legions of Rome were stationed in the island. This alteration has been due to natural causes, such as are for the most part still in action. The sea, under the influence of tides and currents, combined with prevailing winds, continually destroys portions of the coast, and with the material carried away from one district, tends to fill up estuaries and harbours, adding to the extent of land elsewhere. These changes have been most extensive upon the eastern and south-eastern portions of our shores, especially along

the low coasts of Holderness (in the east riding of Yorkshire), and the counties of Norfolk and Suffolk, with the north shore of Kent. Almost throughout this line of coast the sea has made inroads upon the land, so that in numerous instances places which were once of importance have been destroyed by the ravages of the sea, or their sites removed of necessity farther inland. In other parts of the same tract of coast there has been a gain of land, though perhaps not to a corresponding extent. In the case of the low tract which adjoins the Wash,* however, an extensive area of country has, within a comparatively recent period, been reclaimed by human industry. During Roman times, and for long after, a succession of swamps and morasses stretched far up into the interior, above the present head of the Wash, dividing in great measure the modern counties of Norfolk and Suffolk from the rest of the island. Even down to the period of Norman rule, portions of the tract of country now known as the Isle of Ely (Cambridgeshire) were so surrounded by swamps and marshes as to afford an almost impregnable place of refuge to an invader.

The shores of Kent, Sussex, Hampshire, and Dorset, have witnessed similar changes. Throughout the chief part of this range of coast, the falling of cliffs, owing to the erosive action of the water at their base, assisted by the agency of land-springs and rains, has caused the shore-line to recede inland. Tracts of considerable extent have been washed away during storms, and the waters of the sea left flowing permanently over districts which were once inhabited by man.†

* The tract of country described as the Fen District (p. 39).

† A striking example of this is furnished in the instance of the island of Hayling, on the south coast of Hampshire. The site of the most ancient church of Hayling (dating probably from the middle of the eleventh century) is now marked by the "Church Rocks," which lie in the sea at the distance of above half a mile to the south of the present coast-line. This church is said to have stood originally in the centre of the island, which must have been of greatly larger dimensions than it now is. It is probable that the south shore of the island then reached to

The soft sands and clays, or chalk cliffs, which line so large a portion of the eastern and south-eastern shores of Britain, have naturally occasioned such changes to be of more frequent occurrence, and of more extensive character than elsewhere. The shores of Devon and Cornwall, as well as those of great part of the western side of the island in general, are for the most part composed of harder rocks, which yield less readily to the action of the waves.

In Roman times, and for long afterwards, vast portions of Britain were covered with dense forests. These woods gave shelter to the native inhabitants of the island, when compelled to seek refuge from the arms of an invader. It was within their sheltered enclosure that the towns of the aboriginal tribes who possessed the island were for the most part situated. "The Britons (says Cæsar) call by the

within about two miles of the spot now occupied by the Nab Light, *i. e.* to less than three miles distant from the Isle of Wight. The ravages of the sea must in this case have swept away a space of not less than nine miles in length by about five in breadth. These destructive inroads occurred at various periods from the thirteenth century downwards.—*Topographical Account of the Hundred of Bosmere*, by Chas. J. Longcroft. London, 1857.

Changes of an opposite kind have occurred upon other portions of the southern coast-line. The tract which contains the towns of Rye and Winchelsea — once flourishing ports, and members of the corporation of the Cinque Ports — offers an eminent example of a gain of land which has been long in progress, and still continues. Rye, which once stood on the coast, is now nearly two miles inland, its harbour (which only admits small vessels) being formed by the mouth of the river Rother, which, previously to the great storm and inundation in the reign of Henry III. (Oct. 1, 1250) had a totally different outlet. The old town of Winchelsea was in great part destroyed by the sea on that occasion, and suffered complete destruction some years later, in 1287. In the interim, the inhabitants had built a new town — the present Winchelsea, on a site adjoining the sea, and granted for the purpose by Edward I. This second Winchelsea speedily grew into importance, and became a flourishing port; but its prosperity was destroyed by an evil the reverse of that from which its predecessor had suffered. The sea gradually receded from the town, as its harbour and estuary became choked with sand and beach, and the place has long since become a mere village. The site of Winchelsea is now above a mile and a quarter distant from the sea, and the spot where Blake anchored his fleet in 1652 is upwards of a mile inland. An extensive estuary formerly occupied the tract of ground lying immediately to the northward of the present Winchelsea. Similarly, a large portion of Romney marsh, to the north of the town of New Romney, and west of Hythe, was in Saxon times an arm of the sea.

name of a town a place in the fastnesses of the woods surrounded by a mound and trench, and calculated to afford them a retreat and protection from hostile invasion." It was in such a locality that the town of Cassivelaunus, the British chieftain, was situated, in a spot "surrounded by woods and marshes." These forests, long since cleared away, and of which but a few scattered vestiges now remain, gave shelter not merely to the native tribes, but to numerous wild animals, now exterminated from our soil. The wolf, the wild-boar, and the bear, especially the two former, were among the common tenants of the British woods. The fox (now carefully preserved by artificial means), the wild-cat (all but extinct in South Britain), with the otter and numerous other wild animals, were then abundant. The beaver was found in every watered valley.* The wild deer were common in every part of the island. The eagle, now only seen within the farthest recesses of the Scotch highlands, frequented the fens of the eastern coast.

EARLY INHABITANTS.—The earliest references to Britain in the pages of history occur in the writings of Herodotus, the Greek historian, who flourished in the middle of the fifth century before Christ. Herodotus says (book iii.) "Of the extremities of Europe towards the west I cannot speak with certainty . . . . . nor am I acquainted with the islands Cassiterides, from which tin is brought to us." By the Cassiterides, or 'tin-producing' islands, the historian probably means the south-western shores of Britain, which had almost certainly been visited by the traders of Tyre from a much earlier period, for the sake of their characteristic mineral produce.† It is not a little

* The Teify, in South Wales, was the last amongst the rivers of south Britain in which the beaver was found.—(See *ante*, p. 14.)

† The only other mountain region of Europe which furnishes tin is the north-western province of Spain — Galicia. The Scilly Islands, which have been sometimes regarded as representing the Cassiterides, considered as distinct from Britain itself, contain few traces of any tin-workings — none that would account for any considerable supply having ever been

interesting to find that the earliest relationship between the people of the civilised world and the aboriginal inhabitants of the British shores was due to the mineral wealth of our island, a source akin to that which forms the basis of the industrial and commercial wealth of Britain in the present day. Aristotle, a century later, makes mention of two large islands called Albion and Ierne, or Great Britain and Ireland. The name of Albion was undoubtedly derived from the aspect of the white cliffs which line our south-eastern shores, and are conspicuous from a distance.

At the time when the Romans first became masters of Britain the island was inhabited by thirty-five different tribes, or rather, perhaps, nations. The names of many of these tribes have a Celtic element of language in them; a circumstance which supports the presumption, derived from other sources, that the aboriginal inhabitants of the island were of Celtic origin; of the same stock, in fact, as the inhabitants

drawn thence. Diodorus Siculus, however, speaks of the tin which was derived from the "islands called Cassiterides, lying off Iberia, in the ocean," as well as that procured from the promontory of Belerium (the Land's End), and Strabo distinguishes clearly between the Cassiterides and the Britannic Islands. But the ideas of the ancient writers as to the localities which furnished the various articles of commerce were often vague and confused, and derived their colouring from the medium through which the goods themselves finally reached their destined market. The traffic carried on, through the agency of the Arab merchant, with India and Eastern Africa, furnishes an example of this. A part of Arabia itself was regarded as supplying the spices and balms which the caravan-traders of that country really obtained from other lands, and was hence endowed with the supposed attributes of a region abounding in native wealth. Modern exploration has shown that "Araby the blest" has no existence, excepting in the imagination of the poets.

The tin which reached, in ancient times, the shores of the Mediterranean, was transmitted by two distinct lines of route. One of these, in which the Phœnicians were the agents of the traffic, traversed the sea lying between the western extremity of Britain and the coast of Spain, with reference to which latter country both Strabo and Diodorus describe the position of the British shores. The other route lay through Gaul, to which the tin was brought from those parts of the coast of Britain which lay nearest to that country, and whither it had been conveyed by the Britons themselves. It has been suggested that the metal obtained through the former of these routes might not unnaturally have been regarded as the produce of the Cassiterides, while that supplied through the other channel was looked on as derived from Britain itself —though both were in reality obtained from the same quarter.—See article "Scilly Islands" in *Imperial Cyclopædia of Geography.*

of the nearest part of the opposite continent. Of these British tribes seventeen possessed the country lying to the south of the Solway and the Tyne (along which the more southwardly of the Roman walls was afterwards drawn), five lay between that line and the isthmus of the Clyde and Forth, and thirteen were dispersed over the region lying to the north of the last-named division. We owe the enumeration of these British nations to Ptolemy, the geographer of Alexandria, who wrote in the early part of the second century of the Christian era.

The British nations enumerated by Ptolemy are:—

To the southward of the line between the Tyne and the Solway:—

1. CANTII,—dwelling in the county of Kent
2. REGNI „ „ Surrey and Sussex
3. BELGÆ „ „ Hants, Wilts, and Somerset
4. ATREBATES „ „ Berkshire and North Wilts
5. DUROTRIGES „ „ Dorset
6. DAMNONII „ „ from Somerset to the extremity of Cornwall
7. TRINOBANTES „ Middlesex and Essex
8. ICENI „ „ Norfolk, Suffolk, Cambridge, and Huntingdon
9. CORITAVI „ „ Northampton, Leicester, Rutland, Derby, Nottingham, and Lincoln
10. CATYEUCHLANI „ Buckingham, Bedford, and Hertford
11. DOBUNI „ „ Gloucester and Oxford
12. CORNAVII „ „ Warwick, Worcester, Stafford, and Chester
13. BRIGANTES „ „ York, Lancaster, Westmoreland, Cumberland, and Durham
14. PARISII „ „ East Riding of York
15. ORDOVICES „ „ North Wales and part of Shropshire

16. SILURES, dwelling in part of South Wales, with Monmouth and Hereford
17. DEMETÆ „ „ South-west of Wales (Pembroke, Caermarthen, and Cardigan)

From the Solway to the isthmus of the Clyde and Forth:—

18. OTADENI—dwelling along the coast, from the Tyne northwards to the Forth (the modern Northumberland, Berwick, Haddington, and part of Roxburgh)
19. GADENI „ „ inland from the last-mentioned (parts of Northumberland and Cumberland, with Roxburgh, Selkirk, and Peebles)
20. SELGOVÆ—dwelling in Dumfries, Kirkcudbright, and part of Lanark
21. NOVANTÆ „ „ Wigtown and Ayr
22. DAMNII „ „ Lanark, Renfrew, part of Stirling, and the west of Fife

Northward from the isthmus of the Clyde and Forth:—

23. VENICONTES—dwelling in parts of Perth, Forfar, and Kincardine
24. TEXALI „ „ the eastern part of Aberdeenshire
25. VACOMAGI „ „ Banff, Elgin, Nairn, and part of Inverness
26. CALEDONII „ „ Inverness, with parts of Ross and Argyle
27. EPIDII „ „ Cantire and the adjoining coast of Argyle
28. CERONES „ „ western part of Inverness, and north of Argyle
29. CREONES „ „ western part of Ross

BRITAIN
DURING
THE ROMAN PERIOD
Roman Miles
English Miles
1. BRITANNIA PRIMA
2. BRITANNIA SECUNDA
3. FLAVIA CAESARIENSIS
4. MAXIMA CAESARIENSIS
5. VALENTIA
Oceanus Hibernicus
Oceanus Germanicus
Oceanus Vergivius
Oceanus Britannicus
Longitude West of Greenwich
East Longitude

30. CANTÆ, dwelling in the east of Ross and Cromarty (i.e. the peninsular country between the Firths of Moray and Dornoch)
31. LOGI „ „ south-east part of Sutherland
32. MERTÆ „ „ middle part of Sutherland
33. CARNONACÆ „ western part of Sutherland
34. CARENI „ „ north-eastern part of Sutherland
35. CORNABII „ „ Caithness

To the above list of British nations should be added the names of the HORESTI and the ATTACOTTI; the former dwelling along the lower Tay (Perth, Forfar, and part of Fife), the latter within the mountain region adjacent to the upper part of Loch Fyne.*

It will not be supposed that the limits of the various British nations named in the above list coincided precisely with those of the modern counties named beside each. But there is no reason to doubt the general correctness of the localities assigned to them. The Brigantes, a powerful nation, among whom several smaller tribes are believed to have been comprehended, occupied, it would seem, a larger territory than any other, their dominion stretching entirely across the island from sea to sea.

We should not be justified in assuming that the British nations whom Ptolemy enumerates were necessarily all of one stock; still less that they exhibited uniformity of customs and manners, or even precise identity of language. Such identity seldom, if ever, belongs, at an early period of their history, to the scattered population of an extensive country, however it may become the after-growth of their advancing civilisation. The people who occupied the south-western peninsula (Cornwall and Devon), and those dwelling in the extreme south-east (Kent), were probably

* These two nations are not included in Ptolemy's list. The Horesti are mentioned by Tacitus, in the narration of Agricola's exploits. The Attacotti are referred to, in more than one passage, by Ammianus Marcellinus, who wrote in the latter part of the fourth century.

more advanced in civilisation than the inhabitants of the inland districts.*

THE ROMAN CONQUEST.—Nothing could be more natural, or in the ordinary course of events, than that when the legions of Rome, under Julius Cæsar, had overrun Gaul, the shores of Britain should become the next object of attack on the part of their victorious commander. There already existed commercial intercourse between the maritime populations of Gaul and Britain—for the most part of the same race—and there were also political ties which to some extent linked the inhabitants of the two countries to one another. In the summer of the year 55 B.C., the Roman general determined to cross the narrow sea which divides the coasts of Gaul from those of Britain—rendered conspicuous from the opposite side of the channel, in the case of each, from the chalk cliffs by which they are respectively lined.

* "We should probably form (says Mr. Wright) the best appreciation of the condition of our Celtic forefathers before their conquest by the Romans, by comparing them with the septs or clans in Ireland and the Highlands of Scotland in the twelfth and thirteenth centuries. Each chief exercised the same independent and unrestrained authority over his clan, and the disunion of the whole was probably increased by difference of language and race. There seems to be no reason for assuming that the different tribes were accustomed to unite under one head (or, as he has been termed, Pendragon) in cases of emergency. On the contrary, we observe, as far as their history is known, that they never acted together, unless when their union was caused by conquest, or by the alliance of one or two neighbouring, and perhaps kindred, tribes. The statement that they went naked, and that they painted their bodies, can only have been true of some of the most barbarous tribes. We have no very distinct information on the clothes of the Britons, except that we know from the earlier Roman writers that they wore breeches (*braccæ*) like the Gauls and Germans. They are described as being in person taller than the average height of the Romans. The brief account of Tacitus confirms the views already stated as to the difference of races which peopled the island. He imagined that the red hair and masculine forms of the Caledonians bespoke a German origin; that the Silures, by their complexions (*colorati vultus*) and curly hair, were a colony of the Iberi of Spain; and that the tribes who inhabited the coasts came from Gaul; and one of the arguments he adduces for believing that the maritime tribes were of Gallic origin, the similarity of language (*sermo haud multum diversus*), leads us to believe that the language of these tribes was totally different from that of the Silures, or that of the Caledonians, and of the tribes of the interior."—*The Celt, the Roman, and the Saxon.*

Cæsar sailed, on the occasion of his first descent on the British shores, from a port in the country of the Morini (a Gallic nation) whence there was the shortest passage to Britain. In his second expedition, he mentions *Portus Itius* as his place of departure, because he had ascertained that port to afford the most convenient place of passage to the island. We may therefore assume that the same port of embarkation was used upon both occasions. Portus Itius corresponds probably to the modern Witsand, or Wissant, situated a few miles west of Calais, and a short distance to the east of Cape Grisnez. Cæsar embarked his infantry (belonging to the tenth and the seventh legions) on board of eighty vessels, leaving the cavalry to follow in eighteen other ships. The Roman fleet reached the British coasts at the hour of ten in the forenoon, and, after a spirited resistance on the part of the natives, who were drawn up on the shore to oppose them, succeeded in effecting a landing.

The place of Cæsar's first landing in Britain was probably in the neighbourhood of Deal or Sandwich — at any rate, on some part of the east coast of Kent. It is of course impossible to decide with any certainty on the precise spot.* The Romans did not advance far into the interior on this occasion. Stormy weather had delayed the sailing of their cavalry, and the Roman ships, drawn up on the shore, had sustained some injury from a like cause. Anxious to return to Gaul before the setting in of the equinoctial gales, Cæsar did not protract his stay in the territory of the brave and fierce islanders, but, taking with him hostages for their adherence to the submission they had been compelled to promise, re-crossed the channel.

* See on this subject the Note in Long's "Cæsar," and the article on Portus Itius in Smith's "Dictionary of Greek and Roman Geography." If not correspondent to Witsand, Portus Itius may with most probability be identified with Boulogne (*Gesoriacum*), afterwards a frequent place of embarkation for Britain. A theory suggested by the learned Astronomer Royal makes the mouth of the Somme the place of Cæsar's embarkation, and the neighbourhood of Pevensey that of his landing. The arguments used in its behalf, however, fail to convince the present writer of its accordance, either with the narrative of Cæsar, or with the probabilities of the case.

In the following year (B.C. 54), Cæsar visited Britain for the second time. He sailed from Portus Itius, and landed on or near the same spot as before. On this occasion the Romans penetrated a considerable distance inland. They first crossed a river on the banks of which the Britons were posted—probably the Stour. Subsequently, following the retreating enemy, whom they had defeated in an important engagement, the Romans advanced to the banks of the Thames, which they crossed, and thence penetrated to the capital of Cassivelaunus, the British chieftain, who had been placed at the head of the confederate tribes in the south-eastern portion of the island.

The place where Cæsar crossed the Thames is believed to have been in the neighbourhood of Chertsey, in Surrey, where the name of Coway Stakes is regarded as commemorative of the stakes which (as Cæsar tells us) the Britons had driven into the bed of the river, to prevent the Romans from effecting a passage across it. The capital of Cassivelaunus may perhaps have coincided with the site of the town of St. Albans, which, under the name of *Verulamium*, was an important Roman station.*

Cæsar mentions, besides the *Cantii* (or people of Kent), and the *Trinobantes* (the inhabitants of Middlesex and Essex), the following British tribes or nations—the Cenimagni, the Segontiaci, the Ancalites, the Bibroci, and the Cassi. It is not easy to identify these with the names of the nations given in Ptolemy's list. We may assume that all of them lay in comparative proximity to the Trinobantes, and the Cassi are supposed to have been the same as the Catyeuchlani of Ptolemy.

After Cæsar's second visit to Britain, the Romans left the island undisturbed for nearly a century. The geographer Strabo (who wrote about 15 A.D.), and the historian Diodorus Siculus, both supply some information respecting the condition of Britons at this early period.

* The names of Cashiobury Park, near Watford, and of the hundred of Cassio, one of the hundreds into which the county of Hertford is divided, are regarded as preserving the name of the British chieftain.

These authors describe the island as being for the most part flat and woody, having, however, many strong places on hills. The produce of Britain consisted of corn and cattle, gold, silver, and iron, with skins, slaves, and dogs of a superior breed for the chase. The British dogs were widely celebrated, and were so strong and fierce that the Gauls are said to have used them in war. The aboriginal Britons are described as being tall of stature and corpulent, but not well made. Although, according to Strabo, they used milk in great abundance, yet they were not acquainted with the art of making cheese, and were total strangers to gardening and agriculture. Diodorus, however, describes them as practising agriculture, gathering the corn and storing it up in the stalk in thatched houses. Their dwellings were mere temporary erections, formed in the forests by enclosing a space with felled trees, within which they made huts of reeds and logs, and sheds for their cattle.

The tin which had from an early period been exported from Britain, had helped to raise the social condition of the people of the south-western peninsula above that of the islanders in general. We are told by Strabo that 'the inhabitants of Britain who live near the Belerian promontory (the Land's End), are peculiarly hospitable, and, from the great resort of foreigners, more polished in manners. They prepare the tin, and show much skill in working the earth which produces it. This being of a stony nature, and having earthy veins in every direction, they work their way into these veins, and so by means of water separate the fragments. These they bruise into small pieces, and convey them to an island which lies in front of Britain, called Ictis; for at the great ebb of the tide the channel becomes dry, and they carry over the tin in large quantities on wagons. From Ictis the tin is purchased by native merchants, and transported to Gaul.' Ivory bracelets, necklaces, vessels of glass, and similar small wares, were imported (Strabo tells us) into Britain from Gaul.

It is clear, from these and other accounts, that the people of Britain, at this early period, were not all in the same stage of social advance, nor characterised by identity of usage and manner. The people of the south-western and south-eastern coasts, at any rate — perhaps the maritime tribes in general — had made greater advance towards civilisation than the tribes of the interior. They had permanent habitations, though of a rude kind, while the people of the interior, devoted chiefly to pastoral occupations, wandered through the woods, throwing up merely temporary abodes for the shelter of themselves and their cattle.

The Roman conquest of Britain, with a view to permanent occupation, commenced under the emperor Claudius, A.D. 43, and within less than forty years from that date the Roman legions had overrun the whole island, reducing its people to unconditional submission. The general course of the Roman conquest, which we need not follow in detail, was this:—Aulus Plautius landed with an army of 50,000 men, and marching through the southern parts of the island, speedily advanced beyond the Severn. The natives, who at first retreated to their woods and marshes, were defeated whenever they ventured to leave their places of refuge, and encounter the disciplined valour of the Roman troops. Vespasian,* the lieutenant of Plautius, with his son Titus, subdued the people of the south coast and the adjacent Isle of Wight (*Vectis*), fighting numerous engagements, and capturing as many as twenty British cities, or fortified posts.

A later commander, Ostorius Scapula (A.D. 50), erected a line of forts between the rivers Nen and Severn (*Antona* and *Sabrina*), to protect the Roman territory, which already embraced all the country lying east and south of those rivers. The Iceni, who had revolted against Roman rule, were reduced to obedience, and the inhabitants of the wooded districts to the north and west made to feel the

* The same who afterwards became Emperor of Rome.

power of Rome. Ostorius made *Camulodunum* (Colchester) the head-quarters of his army. He subsequently marched against the people of North Wales (the *Ordovices*) and defeated their heroic leader, Caractacus, in the strong position within which he had entrenched himself.

The stronghold of Caractacus on this occasion has been supposed to be marked by Caer-Caradoc, a lofty eminence in the S.W. corner of Shropshire, situated a few miles N. of the river Teme, and on the sides of which there are traces of entrenchments and other earthworks. This, however, is mere conjecture. The name of Caer-Caradoc occurs in other parts of the same county, as in the neighbourhood of Church Stretton, eleven miles S. of Shrewsbury.*

Suetonius Paullinus (A.D. 59-61) carried the Roman arms to the farther border of North Wales, and, crossing the Menai Strait, subdued the island of Anglesey (*Mona* of Tacitus),† the stronghold of the Druids. Recalled from his pursuit of this conquest by the unlooked-for and alarming insurrection of the Iceni, Suetonius afterwards fought a great battle with that people and their allies, under the command of their queen, Boadicea, whose unworthy treatment by the subordinate officers of Rome had occasioned, and justified, the revolt. In this battle, the site of which is unknown, the arms of Rome achieved a decisive triumph, and rebellion against the Roman power was completely crushed, at least for a time.

Julius Agricola (the father-in-law of the historian Tacitus), who held the government of Britain during the years 78-84, carried the Roman arms much farther to the north than they had previously been advanced, and completed the subjugation of the island — at least, of all that portion of it which became a part of the Roman dominions — that is, as far as the line of the Forth and the Clyde. Agricola, besides, introduced into Britain the

* The Caer-Caradoc near Church Stretton forms part of the range of the Caradoc Hills. See *ante*, p. 32.

† The *Mona* of Cæsar is the Isle of Man.

manners, dress, arts, language, and general civilisation of Rome.

One of the first exploits of Agricola was the conquest of the Ordovices, or people of North Wales, and the reduction of the island of Mona (Anglesey), which his predecessor had been obliged to leave uncompleted. The Ordovices were defeated in a great battle, fought, there is reason to believe, amongst the hills of Flintshire. Thence the Roman general advanced to the shore of the Menai Strait, the waters of which presented no obstacle to the accomplishment of his design, though he was unprovided with any vessels in which to transport his army across it. A select body of the Roman auxiliaries, mounted on horseback, and freed from the incumbrances of baggage, taking advantage of the places where the strait is fordable, or nearly so, when the tide is out, crossed the channel, partly by swimming their horses. The native people of the island, struck with terror at the mode of attack, yielded themselves to the mercy of the Roman leader, and surrendered the island.*

In the course of the year 80, Agricola, then engaged in his third campaign, invaded and reduced the lowland portion of Scotland, and carried Roman dominion as far north as the course of the river Tay (*Taus*). In the succeeding summer (his fourth campaign in Britain), the same able commander erected a chain of forts between the estuaries of the Clyde and Forth (*Clota* and *Bodotria*). This was the line afterwards known as the wall of Antoninus (*Vallum Antonini*), the farthest limit of Roman Britain. In his sixth campaign, A.D. 83, Agricola advanced beyond this line, in order to subdue the nations dwelling to the

* Tacitus: Agricola, xviii. A spot amongst the hills of Flintshire, in the neighbourhood of Newmarket (about 4 miles E. of the town of Rhyddlan, on the river Clwyd), is said to bear the name of Bwlch Agricla, or the Pass of Agricola. It may safely be assumed that the advance of the Roman general would lead him through this region, in the heart of the territory occupied by the Ordovices, and, indeed, the only part of North Wales capable of being penetrated with safety by a hostile force.

northward of the firth of Forth (*Bodotria Æstyarium*). The Roman fleet was at the same time directed to cross the firth, and cooperate with the land forces. In the following year (84), a still further advance was made. The legions, led by Agricola himself, marched northward to the foot of the Grampians (*Mons Grampius*), and gained a decisive victory over the fierce Caledonian tribes, under their chieftain Galgacus, while the Roman fleet sailed round the northern extremity of the island, and, returning to their previous station by way of the eastern coast, made the complete circuit of Britain.*

The moor of Ardoch, in Perthshire, near the head of Strathallan, is believed by many writers to represent the place where the great battle between Agricola and the Caledonian leader was fought. There are found here, immediately adjacent to the village of Ardoch, and beside the left bank of the little river Knaig, a tributary of the Allan, the remains of a large Roman military station, with three camps (probably constructed for a temporary purpose) in its close vicinity. Two other Roman stations, of which the remains are in less perfect preservation, occur within the same part of the country, at no great distance: one of them is beside Dealgin Ross, near the south bank of the river Earn, between 7 and 8 miles N.W. of Ardoch; the other is at Strageth, or Stratgeth, six miles N.N.E. of Ardoch, and also on the south bank of the Earn. Other Roman works are found in the neighbourhood.

There is, however, much difficulty in fixing the exact localities of Agricola's positions, and in determining his line of march in his sixth and seventh campaigns. Some antiquaries regard the station at Ardoch, or even the more northwardly station at Dealgin Ross, as the scene of the night attack upon the ninth legion, mentioned as occurring during the sixth year's campaign. On this supposition, the site of the battle with Galgacus, in the

* Tacitus: Agricola, xxv.—xxxviii.

following year, must be looked for farther to the northward.* It was through the plain of Strathmore that the northwardly march of the Roman general, after leaving the neighbourhood of the Firth of Forth, would, from the nature of the country, be naturally directed. The lines of communication between lowland Scotland and the more northwardly portion of the country have necessarily followed this course, from the earliest times to the present day. There are remains of numerous Roman camps in various parts of Forfarshire, some of them of large size. They seem, indeed, to have formed a chain of military posts, reaching across the whole extent of that county, from its south-western to its north-eastern extremity.†

* General Roy (Military Antiquities of the Romans in Britain: London, fol. 1793) thinks the scene of the latter event is to be looked for probably about Fettercairn, or Monboddo (in Kincardineshire), 'or perhaps even nearer to Stonehaven,' — at any rate, somewhere towards the eastern extremity of the Grampians, and within the northwardly and narrower portion of the great plain or strath.

† Those writers who adopt Ardoch as the scene of the final engagement with Galgacus find the locality of the night attack recorded in connection with the campaign of the preceding year at the remains of a Roman camp situated near the little stream of the Ore, two miles to the southward of Loch Leven, in Fifeshire.

The difficulty of assigning precise localities to the movements of the Roman commander is rendered greater, and the conclusions generally arrived at made the less satisfactory, by taking into account the agency of geological changes that have probably been in operation during the lapse of time between the date of the Roman conquest of Britain and the present day. It is far from certain that the coast-line of Britain exhibits the same contour now that it did eighteen centuries since. Indeed in many districts, as round the shores of the Wash, and at the estuaries of the Thames, the Humber, and elsewhere, there is no doubt that very considerable changes in the contact and relative extent of land and sea have taken place. Like changes, there is reason to think, have occurred on the coasts of North Britain, and perhaps even to a more material extent. The raised beaches which are met with, at elevations of from 20 to 30 feet above the present high-water mark, indicate a gradual upheaval of the land above its former level, and the remains of Roman and other works found embedded in the soil, in connection with these elevated margins, appear to show that the change is to be referred to a comparatively recent period. If, as some inquirers have (on geological and other evidence) assumed, the central parts of Scotland, between the Clyde and the estuaries of the Forth and Tay, have become elevated since the first century of the Christian era to upwards of 20 feet above their previous level, large portions of land adjoining the present coast-lines of those estuaries must *then* have been submerged beneath the water.—See Paper by A. Geikie, F.G.S. &c., read before the Geological Society of London, 1862.

THE ROMAN WALLS.—The victories of Agricola made the Romans masters of all South Britain, as well as, for a time, of the southern portion of lowland Scotland — that is, of Scotland as far as the Clyde and Forth. Thus, before the end of the first century of the Christian era, Britain was reduced to a Roman province: frequent intercourse sprang up between Rome and her newly-subjugated territory, and an influx of population from foreign lands was directed towards the latter. The oysters, as well as many other productions of Britain, were well known at Rome. Roman legions were permanently stationed in Britain — the second legion at Isca Silurum (*Caerleon*); the sixth at Eburacum (*York*); the twentieth at Deva (*Chester*) — and Roman towns sprang up in all parts of the island.

But the Roman frontier to the northward was not uniformly maintained at the same place. It was difficult to retain in peaceful subjection the fierce tribes of North Britain, who made frequent incursions into the more open and fertile country to the southward (as their successors did at a much later period). The Emperor Hadrian, who visited Britain in the year 120, erected a formidable barrier across the island, between the Tyne and the Solway. This consisted of a massive wall, nearly seventy miles in length, extending over hill and plain, from the spot now known as Wall's End,* on the Tyne, to Bowhess, on the south shore of the Solway Firth. The wall was accompanied on its southern side by an earthen vallum and a deep ditch, and was fortified with a series of twenty-three military stations or towns, with intermediate mile-castles and watch-towers. This great work, of which there are numerous and massive remains in the present day, is known as Hadrian's Wall. The Emperor Severus, nearly a century later (A.D. 210), perhaps repaired portions of the wall which had fallen into

* It is, perhaps, seldom remembered, on the part of those who familiarly use the term 'Wallsend,' now so well known, that it commemorates a work of Roman greatness — the most stupendous and enduring of such memorials in our island, erected by those who were its masters upwards of seventeen centuries since.

decay, and frequently visited its towns and garrisons during his stay in Britain.

It is not necessary to suppose that the erection of this wall by the Emperor Hadrian implies the relinquishment of the tract of country lying to the north of its limits. The more northwardly barrier, marked out by Agricola, may still have been preserved. It was, at any rate, resumed as the farther limit of the Roman province, when, under the Emperor Antoninus Pius (A.D. 138), Lollius Urbicus, his proprætor or governor in Britain, erected a more complete line of defence across the isthmus between the Clyde and Forth. Following the line of Agricola's work, Lollius Urbicus raised there a new chain of forts, joining them by a continuous rampart of earth and turf. This work, from the name of the emperor under whom it was erected, is usually called the Wall of Antoninus. The portions of it which are now traceable are known by the name of Græme's (or Graham's) Dyke. Along its course there are frequently found inscribed tablets commemorating the portions built respectively by the different troops and cohorts of the Roman army.*

ROMAN ROADS.—It is not the purpose of this work to trace the course of Roman power in Britain, still less to attempt any delineation of the political and social life of the Britons during the lengthened period of Roman dominion in the island. The numerous Roman works which have been found, from time to time, in every part of the country — among them, inscribed tablets, coins, tesselated pavements, and fragments of a vast variety of articles, alike of use and ornament — enable the diligent antiquary to portray, in considerable detail, the social and

* A mound called the 'Chapel Hill,' adjoining the western end of the village of West Kilpatrick (Dumbartonshire), on the right bank of the Clyde, 9 miles below Glasgow, and at which numerous sepulchral stones, with vases, coins, and other Roman remains, have been found, is with good reason supposed to mark the western termination of the wall of Antoninus. The eastern termination of the wall was probably Caer-ridden, on the Forth, 3 miles N.E. of Linlithgow.

domestic life of the time, and furnish, besides, material aid in the way of supplement to such notices of public events as are preserved in the records of written history. For all such details, the student may be referred to the admirable volume named below.*

The Roman roads in Britain penetrated the most distant parts of the island, and there is hardly a county of England and Wales in which traces of them are not extant. Some of these works may have followed the course of earlier roads constructed by the Britons, but in the vastly greater number of instances, the remains now seen are undoubtedly of Roman origin. A Roman road of the first class was really a paved causeway, formed by successive layers of earth, stones, and mortar, the whole surmounted either by stone or by a firm bed of gravel and lime, and was thus a work of very solid construction. It was generally raised above the level of the ground on either side, forming an *agger*. Such roads are found in many parts of the country in a state of very complete preservation, and they form the foundation of many of the best roads in England at the present day. Where such foundations have continued to be used as high roads, they are naturally much worn down, and the extraordinary and undeviating straightness of their course is often the readiest means by which they can be identified. Sometimes, however, where the whole line of road has been disused, or where it runs across an unfrequented heath, the ancient Roman work is visible for miles in succession, forming a continuous embankment. The Roman roads generally ran in a straight line from point to point, some conspicuous object on the horizon serving to give the direction of the course taken. They seldom turn aside to avoid a hill, and in some instances proceeded directly up the face of considerable acclivities. The embankment of the Roman road which ran along the summit of the Gog Magog hills, near

* *The Celt, the Roman, and the Saxon.* By Thomas Wright.

Cambridge, is still perfect. The mountain named High Street, in Westmoreland, derives that name from the fact of a Roman road having run along its summit, at an elevation of nearly 2,000 feet above the sea. Marshes were either drained or filled up by the Roman engineers, where the course of the road made it necessary to traverse them.

A map can alone give a correct idea of the number and direction of the roads by which South Britain was traversed during the Roman period. They connected, it will be seen, all the principal towns of the island. Indeed, it is by their place on the road, and the coincidence of the site with the distance recorded in the Itineraries, that the localities of many of the Roman towns are identified. Several of these lines of road bear the name of *street*, given them, no doubt, by the Saxon settlers in the island, and derived from the Roman strata (i.e. *via strata*, a paved way).* Thus we have Watling Street, the great line of road extending from Dubris (*Dover*), through Londinium, in the direction of north-west, to Deva (*Chester*); Ermine Street, which name is given to the line of way running due north, from the coast of Sussex, through the metropolis, to Lindum (*Lincoln*); Ickniield Street, running in a direction of north-east from the extremity of Cornwall towards the coast of Norfolk, and passing by Isca (*Exeter*), Camboricum (*Cambridge*), and other towns; Ryknield Street, from the Humber towards Durocornovium (*Cirencester*), and several others. Some of these works, again, are known by the term *way*, as the Fosse Way, the Port Way, &c.

Divisions of Roman Britain.—Britannia formed, under its Roman masters, a distinct province of the empire. It was at first under the administration of a proprætor, or

* The frequent occurrence of the word *street*, applied to villages and even to detached houses, in many parts of England, may be noticed as indicative, in numerous cases, of the course taken by a line of Roman road; as also is the recurrence in our village nomenclature of such names as Streatham, Stratford, Stretton, &c. The names Watling, Ermine, and others, were connected with various personages in the Saxon mythology. See *Wright*, p. 456.

military governor. At a later time, towards the close of the period of Roman dominion, the supreme governor of Britain had the title of Vicarius, and was himself subject to the prætect of Gaul. We learn these and other particulars from the 'Notitia Imperii,' a work which probably dates from the early part of the fifth century. At that time the Roman province of Britain included five divisions, distinguished by the names of Britannia Prima, Britannia Secunda, Flavia Cæsariensis, Maxima Cæsariensis, and Valentia. The governors of the two last-named divisions were of consular rank (*consulares*): the three others were governed by presidents (*præsides*).

1. BRITANNIA PRIMA is supposed to have comprehended the country lying south of the Thames and the Bristol Channel.

2. BRITANNIA SECUNDA corresponded to the modern principality of Wales, with the adjacent country on the east, as far as the Severn and the lower course of the Dee.

3. FLAVIA CÆSARIENSIS comprised all the middle and eastern portions of England, from the Severn to the North Sea, and from the Thames to the Humber and the Mersey.

4. MAXIMA CÆSARIENSIS embraced the country extending north from the last-named division to the line of Hadrian's Wall:—corresponding, that is, to the six northern counties, with the exception of part of Northumberland.

5. VALENTIA included the tract of country lying between the two walls — that is, the lowland portion of Scotland, as far north as the isthmus of the Clyde and Forth, with the larger part of Northumberland.*

* The limits of these divisions, as stated above, are commonly marked on maps, but they rest only on exceedingly doubtful authority. The names of the divisions themselves are given in the work entitled 'Notitia Imperii,' a document of high value. The assumed limits between these divisions are derived from the work attributed to Richard of Cirencester, and stated to have been compiled by a monk of that name, in the fourteenth century, from the papers of a Roman general. The same authority states that the country lying north of the Wall of Antonius formed a sixth division, under the name of Vespasiana. There are good

Towns.—The geographer Ptolemy, who wrote about 120 A D., gives the names of fifty-six cities then existing in Britain. These cities, with the modern localities to which they are believed to correspond, are enumerated below: —

In the country of the Novantæ:

Loucopibia	*Whithorn?*	Retigonium	*Stranraer.*

Among the Selgovæ:

Carbantorigum	*Kirkcudbright.*	Corda	*Lynekirk?*
Uxelum	*Castle Over?*	Trimontium	*Eildon.*

Among the Damnii:

Colania	*Lanark?*	Lindum	*Ardoch* (Perthshire).
Vanduara	*Paisley.*		
Coria	*Castle Cary.*	Victoria	*Dealgin Ross* (Perthshire).
Alauna	*Kier?* (near Stirling).		

Among the Otadeni:

Curia	*Borthwick Castle*	Bremenium	*Riechester.*

Among the Vacomagi:

Banatia	*Inverness?*	Tuesis	near *Gordon Castle.*
Tameia	*Braemar Castle?*		

Among the Venicontes:

Orrhea *Bertha?* (at junction of river Almond with Tay, Perthshire.)

Among the Texali:

Devana . . . . . *Norman Dykes* (Aberdeen)?

Among the Brigantes:

Epeiacum	*Lanchester.*	Isurium	*Aldborough.*
Vinnovium	*Binchester.*	Rhigodunum	*Ribchester.*
Cataractonium	*Catterick Bridge, Yorkshire.*	Olicana	*Ilkley.*
		Eboracum	*York.*
Calatum	near *Kendal?*	Camunlodunum	

Among the Parisii:

Petuaria . . . . . *Brough* (on the Humber)?

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reasons for doubting the authenticity of this document as a whole; yet the coincidence between many of its statements (as to particular localities) and the modern discoveries of Roman sites, seems to show that it must have been compiled from materials of some real value, now no longer extant.

Among the Ordovices:

Mediolanium . *Clawdd Coch* (Montgomeryshire).
Brannogenium . *Leintwardine* (Herefordshire?)

Among the Cornavii:

Deuna (Deva) . *Chester.*
Viroconium (Uroconium) . . *Wroxeter.*

Among the Coritavi:

Lindum . . *Lincoln.*
Rhagæ . . *Leicester.*

Among the Catyeuchlani:

Salenæ . . . *Chesterfield*, near *Sandy* (Bedfordshire).
Urolanium (Verulamium) . . *St. Albans.*

Among the Simeni (Iceni):

Venta . . . . . *Caistor*, near *Norwich.*

Among the Trinobantes:

Camudolanum (Camulodunum) . . . . . *Colchester.*

Among the Demetæ.

Luentinum . . . *Llanio* (Cardiganshire).
Maridunum . . *Caermarthen.*

Among the Silures:

Bullæum . . . . . *Usk* (Monmouthshire).

Among the Dobuni:

Corinium (Durocornovium?) . . . *Cirencester.*

Among the Atrebatii:

Nalkua . . . . . *Silchester?*

Among the Cantii:

Londinium . . *London.*
Darvenum (Durovernum) . . *Canterbury.*
Rhutupiæ . . . *Richborough*, near *Sandwich.*

Among the Regni:

Nueomagus (Noviomagus) . . . . . *Holwood Hill.*

Among the Belgæ:

Ischalis . . *Ilchester.*
Hot Springs . . *Bath.*
Venta . . . *Winchester.*

Among the Durotriges:

Dunium . . . . . *Maiden Castle*, near *Dorchester.*

Among the Dumnonii:

Voliba . .	*Lostwithiel?*	Tamare . . .	*Tamerton?*
Uxela . .	*Bridgewater?*	Isca . . .	*Exeter.*

The date of Ptolemy's writings is less than eighty years after the Roman conquest of Britain had commenced, and within forty years after the successes of Agricola had completed the subjugation of the island. We may assume that some, at least, of these cities — probably many of them — must have been already in existence as British towns before the Romans visited the island. This was almost certainly the case with Londinium (*Caer-Lunden* of the Britons), with Camulodunum (*Caer-Colun*), and some others.

A more numerous list of places in Roman Britain is derived from the Antonine Itinerary, a work belonging to the early part of the fourth century (about the year 320). This work is an elaborate record of the great roads throughout the Roman Empire, with a statement of the distances along each, from point to point, in Roman miles. That portion of it which relates to Britain enumerates fifteen distinct *iters*. To facilitate reference, an alphabetical order is adopted in the following list of places mentioned in this work. The names coincide in several instances with those of the cities mentioned by Ptolemy:—

STATIONS MENTIONED IN THE ANTONINE ITINERARY.

Abone . .	*Sea Mills.*	Bremetonacæ .	*Overborough.*
Alone . .	*Ambleside.*	Bremenium . .	*Riechester.*
Aquæ Solis . .	*Bath.*	Brocavium . .	*Brougham.*
Ariconium . .	*Weston.*	Brovonacæ . .	*Kirkby Thure.*
Blestium . .	*Monmouth.*	Burrium . .	*Usk.*
Blatum Bulgium.	*Bowness*, on the Solway.	Cæsaromagus .	near *Chelmsford.*
Benaventa (or Isannavatia) . .	*Burrow Hill.*	Calcaria . .	*Tadcaster.*
Bomium . .	*Ewenny.*	Calleva Atrebatum	*Silchester.*
Bovium . .	*Bangor* (Flint).	Causennæ . .	*Ancaster.*
Bravinium . .	*Leintwardine.*	Camboricum .	*Cambridge.*
		Cambodunum .	*Slack.*
		Camulodunum .	*Colchester.*

Canonium	near *Kelvedon* (Essex).
Cataractonium	*Catterick Bridge.*
Clausentum	*Bittern*, near *Southampton.*
Coccium	*Ribchester.*
Colonia (Camulodunum)	*Colchester.*
Conovium	*Caer Rhun.*
Corstopitum	*Corbridge.*
Crocolanum	*Brough.*
Cunetio	*Mildenhall.*
Danum	*Doncaster.*
Delgovitia	*Millington.*
Derventio	*Stamford Bridge*, Yorkshire.
Deva	*Chester.*
Dubræ	*Dover.*
Durnovaria	*Dorchester.*
Durobrivæ	*Rochester.*
Durobrivæ	*Water Newton.*
Durocornovium	*Cirencester.*
Durolipons	*Godmanchester.*
Durolitum	near *Romford?*
Durolevum	*Judde Hill.*
Durovernum	*Canterbury.*
Eburacum	*York.*
Etocetum	*Wall.*
Galacum	near *Kendal*
Galava	*Keswick?*
Glanoventa	*Ellenborough?*
Glevum	*Gloucester.*
Gobannium	*Abergavenny.*
Isca Dumnoniorum	*Exeter.*
Isca (Silurum)	*Caerleon.*
Isurium	*Aldborough.*
Lactodorum	*Towcester.*
Lavatræ	*Bowes.*
Legiolium	*Castleford.*
Lemanis Portus	*Lympne*, near *Hythe.*
Leucarum	*Llwchwr* (Caermarthen).
Lindum	*Lincoln.*
Londinium	*London.*
Luguvallium	*Carlisle.*
Magnæ	*Kenchester.*
Magiovintum	*Fenny-Stratford.*
Mancunium	*Manchester.*
Manduessedum	*Mancester*, near *Atherstone.*
Margidunum	near *East Bridgeford*
Maridunum (or Muridunum)	*Caermarthen.*
Mediolanum	*Chesterton.*
Mediolanum	*Clawdd Coch.*
Nidum	*Neath.*
Noviomagus	*Holwood Hill.*
Pennocrucium	*Stretton*, near *Penkridge.*
Pontes	*Staines.*
Portus Dubris (Dubræ)	*Dover.*
Portus Lemanis	*Lympne.*
Prætorium	*Filey.*
Ratæ	*Leicester.*
Regnum	*Chichester.*
Rutupiæ	*Richborough*, near *Sandwich.*
Segelocum	*Littleborough.*
Segontium	*Caer Seiont*, near *Caernarvon.*
Sitomagus	*Dunwich.*
Sorbiodunum	*Old Sarum.*
Spinæ	*Speen*, near *Newbury.*
Sulloniacæ	*Brockley Hill.*
Tripontium	*Lilbourne.*
Uroconium	*Wroxeter.*
Uxacona	*Oconyate.*
Vagniacæ	*Southfleet.*
Varæ	*Bodfari* (Flint).
Vennonæ	*High Cross.*
Verlucio	*Sandy Lane*, near Spy Park (Wilts).
Venta Belgarum	*Winchester.*
Venta Icenorum	*Caistor, near Norwich.*

Venta Silurum	*Caerwent.*	Vindomis	*Enham* (Hants).
Veromētum	near *Willoughby* (Notts).	Vindogladia	*Gussage.*
Verulamium	*St. Albans.*	Vindomora	*Ebchester.*
Verteræ	*Brough.*	Vinovia	*Binchester.*
		Voreda	*Plumpton Wall.*

The following places, not found in the above list, are mentioned in the 'Notitia.' Their identity with modern sites is in several instances extremely doubtful: —

Anderida	*Pevensey?*	Gariannonum	*Burgh Castle*, near *Yarmouth.*
Arbeia	*Moresby* (Cumberland).	Morbium	*Templeborough*, near *Rotherham?*
Branodunum	*Brancaster* (Norfolk).	Olenacum	*Old Carlisle.*
Bremetenracum	*Whitbarrow* (near *Greystoke, Cumberland*).	Othona	*St. Peters*, near *Bradwell* (Essex).
Derventio	*Papcastle*, near *Cockermouth.*	Portus Adurni	*Aldrington?*
		Regulbium	*Reculver.*

The 'Notitia' mentions, besides, eighteen stations as occurring along the Wall of Hadrian. Of some of these considerable remains are still in existence. The most eastwardly of them was Segedunum (identified with *Cousens House*, near Newcastle): the most westerly was Tunnocelum, near *Bowness*, on the Solway Firth.

Among the most important of the Roman towns in Britain were Verulamium (*St. Albans*), Eburacum (*York*), Londinium (*London*), Camulodunum (*Colchester*), Deva (*Chester*), Lindum (*Lincoln*), Aquæ Solis (*Bath*), Isca Silurum (*Caerleon*), Glevum (*Gloucester*), Venta Belgarum (*Winchester*), and Rutupiæ (*Richborough*). The two first-named had the privileges of *municipia*: most, if not all, of the others, ranked as *colonia*. Both of those distinctions (the former in a more eminent degree) conferred peculiar rights and privileges on the citizens who dwelt within them. Londinium appears, as the residence of the proprætor, to have been the seat of general government for the entire province. Eburacum, however, enjoyed nearly equal importance in this respect; it was a centre of military command for the northern portion of the province

and was the permanent station of the sixth legion.* The twentieth legion was stationed at Deva (*Chester*). The second legion, originally stationed at Isca (*Caerleon*), was afterwards removed to Rutupiæ (*Richborough*).

Rutupiæ was the ordinary landing-place, or point of departure, to or from the coast of Gaul.†

The following additional names, capable of ready identification with modern localities, occur in the geography of Roman Britain — the greater number of them in the pages of Ptolemy: —

Tarvedrum or Orcas Prom.	*Dunnet Head.*	Antivestæum, or Bolerium, Prom.	*Land's End.*
Vervedrum Prom.	*Dunscansby Head.*	Hercules Prom.	*Hartland Point.*
Taizalum Prom.	*Kinnaird's Head.*	Octapitarum Prom.	*St. David's Head.*
Ocellum Prom.	*Flamborough Head.*	Canganorum Prom.	*Braich-y-Pwll.*
Cantium Prom.	*North Foreland.*	Novantum Prom.	*Mull of Galloway.*
Damnonium, or Ocrinum Prom.	*The Lizard.*	Epidium Prom.	*Mull of Cantire.*

Vara Æstuarium	*Murray Firth.*	Portus Magnus	*Portsmouth Harbour.*
Tava Æstuarium	*Firth of Tay.*	Sabrina Æstuarium	*Mouth of Severn.*
Boderia Æstuarium	*Firth of Forth.*	Moricambe Æstuarium	*Morecambe Bay.*
Gabrantuicorum Sinus	*Filey Bay.*	Ituna Æstuarium	*Solway Firth.*
Metaris Æstuarium	*The Wash.*		
Tamissa Æstuarium	*Mouth of Thames.*		

* The Emperor Severus died at York, A.D. 211.

† Probably the places mentioned in the Itineraries were not all of them towns, in the modern meaning of the word. Some may have been merely military stations. On the other hand, towns must undoubtedly have existed, during the Roman period, at many localities of which the Roman names are unknown to us. We are unable, for example, to identify Worcester with any of the places named in the Itineraries or elsewhere, though the name alone (*cester*, from *castrum*) may be taken as evidence of its Roman origin. Dorchester, in Oxfordshire, is another example.

Abravannus Sinus . .	*Luce Bay.*	Lelannonius Sinus . .	*Loch Fyne.*
Clota Æstuarium . .	*Firth of Clyde.*	Longum Æstuarium . .	*Loch Linnhe.*

Orcades Insulæ	*Orkney Islands.*	Mona (of Tacitus). . .	*I. of Anglesey.*
Ebudæ Insulæ .	*Hebrides.*	Cassiterides, or Æstrymnides, Insulæ . .	*Scilly Islands.*
Mona (of Cæsar), or Monoeda Insula . .	*Isle of Man.*	Vectis Insula .	*Isle of Wight.*

CHAPTER IV.

SAXON ENGLAND.

We learn from the 'Notitia,' that during the later portion of the period of Roman dominion in Britain, the military affairs of the province were directly under the management of the government of Gaul, without the intermediation of the Vicarius (or civil governor) of the island. They were divided among three chief officers—entitled respectively, the Count of the Saxon shore, the Count of Britain, and the Duke of Britain. The first named of these had under his command the garrisons of nine fortresses along the coast, from Portus Adurni (either *Aldrington*, on the coast of Sussex, or else *Portchester*, in Hampshire) to Branodunum (*Brancaster*, in Norfolk).

This statement is of the highest importance, in its bearing upon the early annals of Britain. An extensive portion of the English coast was known, we find, even in Roman times, as the Saxon shore, a fact sufficient in itself to establish the certainty that strangers of Teutonic race were already familiar, at least as occasional visitors, with the south-eastern division of the island, even if they were not, as is most probable, settlers there to some extent. The appellation of Saxon shore cannot be understood in a merely geographical sense, as applying to that portion of the British coast which immediately fronts the native country of the Saxon people: it includes, besides part of the eastern coast, a large portion also of the southern shore, at least as far west as the coast of Sussex—a district which could only have become associated with the Saxon name from the fact

of Saxons being its customary visitors and partial occupants.*

The current statements of history tell us how, a few years after the final withdrawal of the Roman legions from Britain (A.D. 420), the Saxons were called in to the aid of the defenceless islanders, unable to protect themselves against the incursions of the barbarian tribes who dwelt beyond the wall; and how, from the date of the landing of Hengist and Horsa on the isle of Thanet (A.D. 449), down to the closing year of the sixth century, Saxon invaders from beyond the sea established in succession various kingdoms within the eastern, south-eastern, and central portions of the island. To whatever amount of credit the popular narrative of these transactions may be entitled, there is no doubt that England, at the close of the sixth century, comprehended eight distinct Saxon kingdoms. Two of these became united in the early portion of the ensuing century, thereby reducing the number to seven.

Who were the Saxons, and whence did they come? It is perhaps impossible to identify with precision the localities whence the early Saxon settlers in Britain came, but the general area of that people is sufficiently well marked. It comprehended the coasts of the North Sea and the Baltic, from the Rhine to the mouth of the Oder (including the basin of the Weser and the lower portion of the basin of the Elbe), together with the southward and narrower part of the Cimbric Chersonese. The tract embraced within this

* Antiquarian researches tend to establish the probability that the transition from Roman to Saxon was in great measure gradual, and that the latter race were already to some extent settlers in Britain before the former had abandoned it. In parts of the south-eastern division of the island, Roman and Saxon must have been dwellers side by side. 'At Canterbury, Colchester, Rochester, and other places, we find (says Mr. Wright) Roman and Saxon interments in the same cemetery; and in the extensive Saxon burial-ground at Ossengal, in the Isle of Thanet, a Roman interment in a leaden coffin was met with. The result of the discoveries which have been made in the researches among the Saxon cemeteries has been to render it more and more probable that the Saxons were gradually gaining a footing in the island before the period at which the grand invasions are said to have commenced'—*The Celt, the Roman, and the Saxon.*

SOUTH BRITAIN
DURING
THE SAXON PERIOD
English Miles
Kilometres
Irish Sea
Ocean
German
Bristol Channel
English Channel
Galloway
Northumberland
Norfolk
Suffolk
Hereford
Warwick
Durham
Chester
Worcester
Leicester
Lincoln
Derby
Stafford
Salop
Oxford
Gloucester
Monmouth
Cornwall
Devonshire
Dorset
Somerset
Wiltshire
Hampshire
Sussex
Surrey
Kent
Isle of Thanet
Isle of Wight
Isle of Scilly
Scilly Is.
Longitude West
at Greenwich
East Longitude

area answers to the modern kingdom of Hanover, with Oldenburg, Mecklenburg, Holstein, Sleswig, and the chief part of the present kingdom of the Netherlands. The tribes or nations who dwelt within these limits were distinguished by different names, as well as by differences of dialect and usage. The Jutes and Angles inhabited the Cimbric Chersonese. The former people have left their name to the modern Jutland, and in Sleswig there is a district which is still known by the name of Anglen — regarded by some writers as the source whence the word Anglia (or England) is derived. It is uncertain, however, whether any of the early Saxon invaders and colonists of Britain were Jutes, properly so called.

All the dwellers within the area above indicated, together with those dwelling further northward, on the shores of the Scandinavian peninsula, both on the side of the Baltic and the North Sea, had a general resemblance and belonged to the same great stock — that is, the Gothic or Teutonic. They were all hardy freebooters, ready for adventure whether by land or sea, and living under chieftains who were able as well as willing to carve out their fortunes with their swords.

THE SAXON KINGDOMS.—The Saxon Kingdoms in Britain, at the close of the sixth century, were—

1. KENT (*Cantware*), embracing the county of that name. founded A.D. 457, under Eric the son of Hengist. *Canterbury* was its metropolis.
2. SUSSEX (i.e. *Suth-Seaxe*, or county of the South Saxons), embracing the counties of Sussex and Surrey: founded A.D. 491, under Ella. Chief city, *Chichester*. The kingdom of Sussex included the larger portion of the forest of Andreadeswold (or Andredswold), said to have extended 120 miles in length by 30 in breadth. The tract of country still known as the Weald corresponds to part of this region.

WESSEX (*West-Seaxe*, or West Saxons), embracing the

country extending from the border of Sussex westward to the river Ex, and from the south coast to the Thames and the estuary of the Severn — i.e. the modern Hampshire, Berkshire, Wiltshire, Dorset, Somerset, and a part of Devon. Founded A.D. 519, under Cerdic. Capital, *Winchester*.

4. ESSEX (*East-Seaxe*, or East Saxons), including, with Essex, the county of Middlesex — i.e. Middle-Seaxe, and the chief part of Hertford. Founded A.D. 527, under Ercenwine. Capital, *London*.
5. BERNICIA (*Bryneich*), embracing the modern Northumberland, with the adjacent portion of lowland Scotland as far as the south shore of the firth of Forth. Founded A.D. 547, under Ida. Capital, *Bamborough* (or Bebbanburgh).
6. DEIRA (*Deornas*), extending between the Humber and the Tyne — i.e. the modern Yorkshire and Durham: founded A.D. 560. Capital, *York* (Eboforwic).
7. EAST ANGLIA (*East Engle*), embracing the modern Norfolk (*North-folk*), Suffolk (*South-folk*), and Cambridge. Founded A.D. 571. Capital uncertain.
8. MERCIA (*Myrcna*), comprehending all the midland portion of England, as far west as the Welsh border, and extending in the direction of north and south from the Humber to the Thames. Founded A.D. 626. Capital uncertain.

About the year 617, Bernicia and Deira became united in the single kingdom of NORTHUMBRIA, thus reducing the number of the Saxon kingdoms to seven.

BRITISH KINGDOMS.— The Saxon Kingdoms enumerated above did not include the whole of South Britain. A considerable portion of England, and the whole of Wales, lay beyond their limits, as also did the larger part of the Scotch lowlands, to the south of the Clyde. The whole western side of the island, from the Clyde to the Land's End, re-

mained unconquered. The natural features of this extensive tract of country, for the most part difficult of access, and still more difficult to hold in occupation, enabled its original possessors, the Britons, to retain their independence. Here, as in many regions elsewhere, the native tribes preserved among the hills the freedom which they lost in the plains. In the south-west, the standard of the kings of Wessex advanced by slow degrees to the westward. First the line of the Salisbury Avon, afterwards that of the Ex, and later the course of the Tamar, marked the long-contested frontier. Nearly two centuries elapsed after the landing of the Saxons before they had penetrated into Devonshire. Driven from the banks of the Ex, the Britons found a retreat beyond the Tamar, which in the early part of the tenth century marked the limit of West Saxon dominion. The natives of the rugged Cornish peninsula preserved their freedom until the reign of Athelstan.

The British Kingdoms, coeval with the eight (or afterwards seven) Saxon Kingdoms, were—

1. STRATH-CLYDE, or lowland Scotland from the estuary of the Clyde to the Solway. *Alcluyd*, the modern Dumbarton, was its capital. Strath-clyde was probably inclusive, at least at times, of several smaller kingdoms. It was sometimes united with—
2. CUMBRIA, i.e. the modern Cumberland, Westmoreland, and Lancashire, or the western tract from the Solway to the Mersey, and reaching inland to the high grounds of the Pennine range.
3. WALES, which formed several distinct kingdoms.
4. DEVON and CORNWALL (or Damnonia), to which the name of West Wales was sometimes given.

BRITAIN IN THE NINTH CENTURY.—The smaller Saxon Kingdoms gradually declined, and became absorbed in their more powerful neighbours. Sussex was annexed to Wessex before the close of the seventh century: both Essex and Kent were incorporated within Mercia before the succeeding

century had elapsed. East Anglia was in great measure occupied by Scandinavian invaders.

During the later half of the eighth century the Saxon kingdoms in Britain were reduced in number to three—NORTHUMBRIA, MERCIA, and WESSEX. The two former of these gradually declined in power, and Egbert, king of the West Saxons (800–836), from the year 827 downward exercised predominant sway over the whole of Saxon England—that is, over South Britain from the Tweed to the English Channel, and from the German Ocean to the border of Wales. *Winchester* was his capital. The laws, institutions, and language of the West Saxons hence became dominant over those of the other Saxon settlers in Britain.

We need not suppose that the British population were altogether expelled from even any portion of the soil of which the Saxons had become masters. Many of them doubtless remained, and were more or less mixed up with their conquerors. This was more particularly the case in the midland kingdom, Mercia, than in other parts of the conquered country. The south-east and south became more specially Saxon than either the east, the north-east, or the centre. In these latter directions another element of admixture was being rapidly introduced.

THE DANES.—During the reign of Egbert, a body of Danes advanced up the estuary of the Thames, plundered the Isle of Sheppey, and afterwards escaped to their ships (A.D. 832). During the two hundred years which followed, the Danes were everywhere the terror of Saxon England. Their standard, the raven—fit emblem of their habits of rapine, and of the keenness with which they pursued their prey—was seen in every estuary of the British waters, and everywhere carried terror with it.

Who were the Danes? The people so called in English story were, properly, Norse, or Northmen, the native inhabitants of Scandinavia and the Baltic coasts. They were derived rather from Norway than from the Denmark of

modern geography, though all three of the Scandinavian countries — Denmark, Norway, and Sweden — contributed to the supply of the dreaded invaders. The Northmen, from the shores of the Cattegat to the North Cape and the head of the Baltic, were throughout sea-warriors and pirates. In the ninth and tenth centuries, they ravaged the coasts of Europe from the North Sea to the Bay of Biscay, and even penetrated the waters of the Mediterranean, extending their inroads as far as the shores of Greece.* The coasts of England and France were by turn the scene of their destructive inroads, and in both countries they effected a permanent settlement.

Between the Saxon settlers in Britain, and the Scandinavian pirates, known in history as Danes, who ravaged their coasts, there were many points of resemblance, indicative of a common (or nearly common) origin. The languages spoken in Denmark, Sweden, Norway, Iceland, and the Faröe Islands (the two latter discovered and settled by the Northmen), were closely akin to the dialects proper to the Anglo-Saxon race. All of those tongues, indeed, Scandinavian and Teutonic inclusive, are comprehended under the common term *Gothic*.†

The great point of difference between the Anglo-Saxons and their invaders consisted in the maritime skill of the latter. The sea was the element upon which the Northmen best displayed their skill. 'Every family had its boat or ship, and the younger sons of the noblest of the land had no other fortune than their sword and their chiules' (i. e. keels). They often drew their vessels on shore for safety, or dragged them overland, from one estuary or river to another. The Saxons, on the contrary, at least in the

* Charlemagne had shed tears at the thought of the future disasters which awaited his empire, as he gazed from a port on the Mediterranean upon some Norman cruisers which had penetrated its waters.—Hallam: *Middle Ages*, chap. i.

† Of the Gothic stock of languages, the Scandinavian is one branch, the Germanic or Teutonic is another.—Latham: *Handbook to the English Language*.

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earlier period of Danish invasion, with the growing addiction to the settled industry of the husbandman, had lost their ancestral aptitude for maritime pursuits. Hence the efforts of the great Alfred in the creation of a navy, the surest defence of the English coasts.

In the year following their inroad on the Isle of Sheppey, the Danes landed on the coast of Dorsetshire. In the succeeding year they formed an alliance with the British inhabitants of Cornwall, but were defeated with great slaughter at Hengestendun, or Hengsdown Hill (Hingston Down, to the west of the Tamar, near Callington.)

After the death of Egbert, the Danish inroads were comparatively unchecked. The Danes ravaged the coast of Wessex and Kent, sailed up the Thames and Medway, and pillaged London, Rochester, and Canterbury—not, however, without sustaining some severe checks at the hands of the Saxons. Under Ethelbert (860–866), they burnt Winchester, and established themselves permanently in the Isle of Thanet. The reign of Ethelred (866–871), the brother and successor of Ethelbert (and the immediate predecessor of his brother Alfred), was one of continual conflict with the Danes, fresh bands of whom continually replaced the vast numbers that fell before the army of the West Saxons. It was during the reign of Ethelred that the Saxons, led by Alfred, gained over the Danes the great victory of Æscendun, the site of which is probably to be found at Ashdown, in Berkshire, beside the vale of White Horse, which latter work, indeed, is regarded by many writers as commemorative of the event.

When Alfred ascended the throne of the West Saxons, (A.D. 871), the fortunes of the Anglo-Saxon people were at their lowest ebb. The Danes were in almost undisputed possession of by far the larger part of England. They had thoroughly overrun all Northumbria, from the Tweed to the Humber, and were in possession of the important city of York. The counties of Lincoln, Nottingham, Cambridge, Norfolk, and Suffolk were devastated by them, and their fortified

posts ranged over the breadth of the island as far west as the Severn. The Saxon standard had been gradually driven back towards the south-west, and it was only in Somerset and the adjoining lands that the Saxons found a rallying place. A Danish army had now wintered seven years in the land.

During the few years immediately following his accession, the arms of Alfred were successful. But he was surprised (878) at Chippenham, by the army of Guthrun, in the depth of winter, and was obliged to seek safety in temporary concealment, while his opponents overran all Wessex.

Athelney — i. e. *the Prince's Island* — a tract then insulated by the waters of the rivers Parret and Tone, joined to bogs and inundations, and covered by a dense wood, was Alfred's place of retreat.* His concealment did not last longer than five months.

The men of Wessex met Alfred at Egbert's Stone, on the east of Selwood Forest — then of greatly superior dimensions to the tract now known by that name — and the Danes were thoroughly defeated in the battle of Ethandune. The locality of Egbert's Stone is supposed to be found at Brixton Deverill, near Warminster. Ethandune is probably found at Eddington, near Westbury, which lies under the western escarpment of the chalk district of Salisbury Plain.†

But the Northmen were too numerously settled in the land for their expulsion to be accomplished by a single victory, or probably by even a dozen victories. Alfred adopted a wiser policy — one to which the nation that has grown up from the mixed blood to which the hardy Northern sea-kings contributed is largely indebted. He

* The revolutions worked by engineering science have within the last few years restored the name of Athelney to the map of England. The station so called, on the line of railway between Durston and Yeovil, is within the tract of country referred to above. The fertile meadows which spread around, dotted with thriving homesteads, and intersected by roads which connect the towns and villages of West Somerset, give the district an aspect strikingly different from that which it must have presented in the days of Saxon and Danish warfare.

† Ethandune is by some writers, however, identified with Eddington, near Hungerford, on the western border of Berkshire.

made a treaty with Guthrun, in virtue of which the right of permanent settlement within a large part of England was ceded to the Danes, on condition of their embracing Christianity and adopting the habits of peaceful settlers. The territory embraced within this cession took the name of Danelagh — i. e. *Dane-law*. It retained this name down to the Norman conquest.

THE DANELAGH — or tract of country within which the Danish settlers were so largely intermingled with the Anglo-Saxon population as to establish a recognised admission of their own laws and usages — embraced all the east side of England, from the Thames to the Tweed, and stretched far into the midland division of the island. The south and the west were left to the West-Saxon king. The terms of Alfred's treaty with Guthrun were — "Let the bounds of our dominion stretch to the river Thames, and from thence to the water of Lea, even unto the head of the same water; and thence straight unto Bedford, and finally, going along by the river Ouse, let them end at Watling Street." All to the east of this line, as far as the Humber, was ceded to the Danes, and they were already in possession of Northumbria, i.e. of York and the adjoining country as far as the Tweed.

The Danelagh included fifteen counties — viz. Lincoln, Norfolk, Suffolk, Essex, Cambridge, Huntingdon, Bedford, Hertford, Middlesex, Buckingham, Northampton (with Rutland), Leicester, Nottingham, Derby, and York (including, probably, Durham). Danes, or people of Scandinavian blood (i.e. Northmen), were by this time at least partially settlers on the western coast of England from the Solway southward, as well as in the Isle of Man and upon the Western islands and coast of Scotland. There was then, over by much the larger half of South Britain, an admixture of the Scandinavian element in the population growing up on English soil.

The repose of several years which ensued was disturbed

in 893 by a fresh invasion of Northmen, under their famous leader Hasting. The intruders landed near Romney Marsh, at the eastern termination of Andreadeswold. Hasting prolonged the conflict against Alfred through three successive years, in the course of which he carried the war across the whole country, to the banks of the Severn, but the genius of the Saxon king ultimately prevailed. The island of Mersea, on the coast of Essex, and the village of Buttington, on the right bank of the Severn, a short distance below Welshpool, were successively the strongholds of the Danish leader.

Alfred, like his predecessor Egbert, only styled himself King of the West-Saxons — i. e. of Wessex. The first to assume the title of King of the Anglo-Saxons, or English, was Athelstan, the grandson of Alfred. The Anglo-Saxon nation, we have seen, included a large Scandinavian element.

Throughout the Saxon period, Wales (or Cambria), in the west, with Cumbria and Strath-clyde, in the north-west, were independent kingdoms. Edgar, the great-grandson of Alfred (A.D. 958–975), succeeded, however, rather by policy than by force of arms, in bringing all the neighbouring states into nominal vassalage to his own dominion. Upon one occasion, eight kings are said to have rowed Edgar's barge upon the river Dee, while he held the helm. These were, the king of the Scots — of the Cumbrians — of Man and the Islands — of Galloway — of Westmere* — and three Welsh kings. It was Edgar who commuted the tribute agreed to be paid by the Welsh into three hundred wolves' heads annually, with a view to diminish the numbers of those ferocious animals.

ENGLAND UNDER SCANDINAVIAN RULE. From the reign of Athelstan, the incursions of the Northmen appear to

* That is, "The Western Sea," by which is perhaps to be understood the broader portion of the Firth of Clyde, with the included islands. Lappenberg and others, however, understand Westmoreland to be intended.

have ceased, until, in the 3rd year of Ethelred the Unready (981), the Danish raven was again seen floating in Southampton Water. Descents were made upon numerous and distant points of the coast. The cities of London, Southampton, and Chester, with many other places, were plundered. Peace was only obtained by the dangerous expedient of buying off the invaders. Year by year, the terms of such payment had afterwards to be increased. Thus arose the tax long known as *Dane-geld.*

During several years of Ethelred's reign, the Northmen ravaged England almost at will, and oppressed the peasantry. In 1002, with Ethelred's connivance (if not by his express order), a general massacre of the Danes, at the hands of the Saxon population, took place. In the following year, Sweyn, King of Denmark, crossed the sea with a numerous fleet, and in 1013 — after several successive years of bloody inroad and devastation — became acknowledged sovereign over the whole of England. Canute, the son of Sweyn (after a brief temporary partition of the kingdom between himself and Edmund Ironside — a natural son of Ethelred), succeeded to his father's power, and reigned at once over England, Denmark, Norway, and Sweden. England and Scandinavia were thus united under a single monarchy. Canute, an able and powerful monarch, reigned from 1017 to 1035.

The Saxon line of monarchs was restored in the person of Edward the Confessor, during whose reign (1042–1066) the civil power of the state was chiefly in the hands of Earl Godwin and his family. All the east and south of England, from the Wash to the Bristol Channel, was divided between three great Earldoms — those of East Anglia, Wessex, and Gloucester, respectively administered by Godwin and his two sons, Sweyn and Harold. East Anglia was Harold's Earldom, and *Dunwich** (on the coast of

* Dunwich, now an insignificant village, was formerly an important and populous town. Its decay has been due to natural causes, in operation from an early period. The cliffs on this line of coast are continually undermined by the sea. In the sixteenth century, not one quarter of the former town was left standing. — Lyell: *Principles of Geology.*

Suffolk) was his capital. The midland portion of England constituted the Earldom of Mercia (under the rule of Leofric); the portion lying north of the Humber (forming the Earldom of Northumbria) was under Siward, the rival of Godwin. But the personal predilections of Edward were strongly in favour of another race — the Normans — among whom he had passed twenty-seven years of exile.

Upon Edward's death (January 5, 1066), Harold, the most popular of Godwin's sons, was chosen by the English nation for their king; but had immediately to contest his throne — first with a Norwegian, afterwards with a Norman, foe.

Harold's first danger was from his own brother Tostig, in alliance with Harold Hardrada, the King of Norway. The battle of *Stamford Bridge* (on the river Derwent, 7 miles ENE. of York) was fought, and a complete victory was gained by the Anglo-Saxon King. Within three days of this victory, the Norman army, under Duke William, landed on the coast of Sussex, and Harold had to hasten southward, to encounter a new and more formidable foe. The result was the battle of *Hastings*, fought where the town of Battle now stands, on October 14, 1066.

CHAPTER V.

ENGLAND AT THE TIME OF THE CONQUEST.

In the time of Edward the Confessor, the division of England into shires or counties was in familiar use. At what period the division of counties originated cannot be determined, but it is certainly older than the time of Alfred. The counties of Saxon England did not precisely correspond, however, with those of the present day. During the latter part of the Saxon period, there were reckoned 32 counties. Fifteen of these were within the Danelagh, nine were comprehended in Wessex, and eight were in Mercia. The counties belonging to the Danelagh have been already mentioned.* The nine West Saxon shires were Kent, Surrey, Sussex, Hants, Berks, Wilts, Dorset, Somerset, and Devon. The eight Mercian shires were Oxford, Gloucester, Worcester, Warwick, Stafford, Chester, Shropshire and Hereford.

The counties were further divided into hundreds and tithings, the former of which denominations maintains its place in the present day. This division, it is generally assumed, was originally numerical: that is, each tithing included ten heads of families, and each hundred was composed of ten tithings. But if so, it speedily became territorial, and it is as such it must be regarded.† There is, indeed, no correspondence between the hundreds in

* Page 104.

† Hallam: View of the State of Europe during the Middle Ages, chap. viii. See also Kemble: The Saxons in England, book 1, chap. ix. The division into counties, and of these into hundreds and decennaries, was not peculiar to England. It prevailed in France and Lombardy.

respect of magnitude, but it is clear that a division based in the first instance upon population would speedily lose its correctness of attribute in such regard, and become merely territorial.

This division of England into counties, hundreds, and tithings, dates from an early period of the Saxon settlement. The impression, long prevalent, of its having originated with Alfred, is now universally regarded as erroneous. The division itself is by no means uniform throughout the kingdom, a fact sufficiently explained by reference to the different conditions under which the Saxon kingdoms in Britain were established, and the circumstances under which they became united into a single monarchy.* In the four northernmost counties — Northumberland, Cumberland, Westmoreland, and Durham — a division into *wards* takes the place of that into hundreds. Two, at least, of those counties formed no part of Saxon England — at least not during the earlier and longer portion of the Saxon period.† The counties of York and Lincoln are divided into *wapentakes*,‡ and each of those counties has an intermediate division into three parts. In Yorkshire, this threefold division forms the well-known *ridings*, or properly *trithings*. Kent and Sussex, again, have an intermediate division between the county and the hundred—the former into *lathes*, the latter into *rapes*.§

Besides these divisions, Saxon England was further divided, for purposes of local jurisdiction, into *townships*, or, as we should now term them, manors. The word town,

* The division of Wales into counties and hundreds did not take place until after the conquest of that principality by Edward I., and was not completed until the reign of Henry VIII.

† The term "ward" points to a time when the inhabitants of the border districts were compelled to keep continual watch and ward against their restless neighbours, the Picts and Scots.

‡ Some of the divisions of Lincoln are known as hundreds, others (and the greater number) as wapentakes.

§ Kent is divided into 5 lathes, which are subdivided into sixty-three hundreds. Sussex is divided into 6 rapes. "It is impossible," says Hallam, "to reconcile the varying size of hundreds to any single hypothesis." The county of Sussex contains 65, that of Dorset 43; while Yorkshire has only 26 and Lancashire but 6.

or township, is derived from the Saxon *tynan*, to enclose. Denoting (says Palgrave) in its primary sense the enclosure which surrounded the mere homestead or dwelling of the lord, it seems to have been gradually extended to the whole of the land which constituted the domain. Out of these townships, in cases where an increasing population was drawn to any particular spot, grew the *towns* of later date. The larger towns were distinguished among the Saxons by the name of burghs.

The division into parishes is at least as old as the tenth century. The number of parishes was formerly somewhat greater than at present. This is obvious from the fact that several parishes in the present day exhibit two names coupled together.* But an enormously exaggerated estimate of the number of parishes appears to have been early prevalent. One account makes the number of parishes at the time of the conquest above 45,000, and that of the villages above 62,000.† At the present time, the total number of parishes in England and Wales is considerably below 15,000.

A remarkable fact, illustrative of the condition of England during the earlier period of its history, is the existence in those times of nearly all the places marked, as towns, villages, &c., on the Map of England in the present day. With very few exceptions, the towns, villages, and hamlets, belonging to the England of the nineteenth century, are as old as the Saxon period, and not a few of them date from the earlier times of Roman rule in Britain. The proof of

* Instances of this are readily found in looking through any list of parishes. Marton cum Grafton (Yorkshire) is one example: Ludgershall with Kingswood (Bucks) is another.

† Pictorial History of England, book 2, chap. vii. A curious instance of legislative error, based upon this exaggerated estimate of the number of parishes, is recorded. The parliament of 1371 granted Edward III a certain subsidy, to raise which it was estimated that an assessment at the average rate of £1 2*s.* 4*d.* upon each parish would be sufficient: but it was found, when the rate was actually levied, that the number of parishes had been taken to be five times more numerous than was really the case; so that the rate had eventually to be raised to £5 16*s.* on each.

this is found in the *names* which belong to the topography of England, and which in the vastly greater number of instances are either of Saxon or of Danish origin, in so far as the habitations of man are concerned.

The population of England, at the close of the Saxon period, is not supposed to have greatly exceeded two millions. Yet the fact just mentioned shows that there were nearly as many inhabited towns, villages, and hamlets, ten centuries since as at the present time. The towns of that day were not only very much smaller than even those of least importance in modern times, but their populations bore a less ratio to that of the country at large. The Saxon population of England was devoted chiefly to husbandry and pasturage, and, like all such populations, was scattered widely over the land. "On the natural clearings in the forest, or on spots prepared by man for his own uses; in valleys, bounded by gentle acclivities which poured down fertilising streams; or on plains which here and there rose, clothed with verdure, above surrounding marshes; slowly, and step by step, the warlike colonists adopted the habits and developed the character of peaceful agriculturists." * The population of Saxon England was less a town population than that of the prior Roman period had been. It would seem, indeed, that many of the Roman towns had been allowed to fall into decay, during the period of Saxon settlement.

The geographical nomenclature of Britain throws great light upon the circumstances of its early settlement, and points out, in many instances, the localities of which the successive races by whom it was colonised became the occupants. The names of natural features, in the greater number of instances, are of Celtic origin, and they are almost exclusively so upon the western side of the island — that is, within the highland regions, which remained in

* Kemble: The Saxons in England, book 1. See also book 2, chap. vii.

almost undisturbed possession of the earlier race, after the Saxons had supplanted them elsewhere. Throughout the island, the greater number of the mountains and rivers have never lost their Celtic appellations, and these are preserved also by not a few of the earlier towns.*

Of Celtic names, which enter largely into the geographical nomenclature of Britain, the following are among those of most frequent occurrence: —

Aber, applied to the mouth of a stream, or a place at the confluence of two streams. Aberdeen, at the mouth of the Dee; Aberystwith, at the confluence of the Ystwith with the Rheidiol; are amongst the numerous examples. Instances abound in Wales.

Afon, or *Avon*, a running stream, or river. The numerous rivers that bear the name of Avon are a well known truth of British geography. They are distributed over the island, from the southern coast of Devon to the northern slope of the Grampians, and are most numerous within the more hilly districts of the west. In Wales, nearly every running stream is an Afon.

Bally, or *ball*, a place. Places with this prefix abound in Ireland.

Ben, or *Pen* (Celtic *beinn*), a hill, mountain, or promontory. This is found throughout Britain. For example, Pen-maen-mawr (the mountain of the great stones), in North Wales; Pendle Hill, in Lancashire; Pen-y-gent, Yorkshire; and the numerous 'Bens' of Scotch geography.

Caer, a fortified place, as Caer-Caradoc, Caer-went, &c.

Ceraig, a rock or crag, as in Capel Ceraig (Capel Curig; North Wales).

Cwm (*Coombe*), a valley under the escarpment of a hill; a hollow. The beautiful coombs or valleys of Devon offer familiar examples. *Cwm* abounds in the geographical nomenclature of Wales.

Dun, or *din*, a place hedged in; a town or hill foot. Caer-Lundun (London) is an example: Dunbarton (now Dumbarton) is another.

Glen, a small valley. The numerous highland glens illustrate the use of this term. The correspondent term Glyn is of frequent

* Many names of places point to the condition of the country at this time when the Saxon settlers first made it their home. "Thus," says Mr. Wright, "we can have no doubt that the site of Beverley was then a plain so unfrequented by man as to be occupied only by beavers, or that places with names compounded of such words as wolf, boar, &c., were the usual resorts of those animals, long the savage tenants of the British woods."

occurrence in Wales. Glen is also common in Ireland, amongst the mountains of Wicklow, Antrim, and elsewhere.

Inch, or *Innis*, an island: as Inch-Keith, &c.

Inver, a confluence of waters, or the mouth of a river; as in Inverness (the mouth of the Ness); Inverury (the confluence of the river Ury with the Don), and numerous other cases. Both *inver* and *aber* occur in Scotland, but inver is not found in Wales, nor aber in Ireland.

Kill, or *cill*, a church. Kill is the well-known prefix to a vast number of Irish names. It is also common in Scotland (Kilsyth and Kilwinning are examples). *Cil* is of not unfrequent occurrence in Wales; thus, Cil-y-cwm, in Caermarthenshire, in the valley of the Towy river.

Lin, *linn*, *lynn*, a deep pool, a lake. Of common occurrence both in Scotland and in Wales.

Llan, a spot cleared for public meetings; an enclosure; a church, or town with a church. Welsh geography offers a vast number of examples.

Maen, a stone or rock. As in Pen-maen-mawr.

Mawr, or *more*, great. As Ben More, the great mountain; Glen-more; Strath-more, &c.

Nant, a vale: as Nant-glyn (Denbighshire); Nantwich, &c.

Slieve, or *sliabh*, a mountain: examples abound in Ireland, as Slieve Bloom, &c.

Strath, or *ystrad*, a valley near the confluence of two rivers, or lying along the course of a river. Ystrad is common in the geography of Wales, as strath is in that of Scotland. The Scotch straths are found either within the Celtic area—i.e. within the Highlands, or else within the border district between the Highland and the Lowland region.

Tar, *tarbet*, a promontory; a point over which a boat could be drawn: the coasts of Scotland supply several examples. Tarbet (or Tarbert) also appears on the western side of Ireland.

Uisge, water. This appears, in the form of *Esk*, in the instance of numerous streams in Britain, especially within the hilly portions of the Scotch lowlands. The North and South Esk of Forfarshire, the like streams of Mid-Lothian, the Esk of Dumfriesshire and Cumberland, and the North Yorkshire Esk, are examples. The *Wiske* of Yorkshire, and the *Usk*, or Wysg, of South Wales, have the same origin; as also, through the medium of *isca*, the Latinised form of the Gaelic uisge) have the rivers Ex and Axe.*

* Hence Isca Silurum (Caerleon), beside the stream of the Usk—uisge, or water, of the Silures; and Isca Dumnoniorum (Exeter) similarly situated with respect to the Ex, or uisge, of the Dumnonii, or

The following are among the forms which enter most commonly into Anglo-Saxon geography: —

Beck, a brook; more frequent in the north of England than in the south, at least in the present day. It represents the German *bach*.

Beorh, *burgh*, or *borough*, a fortified place, stronghold, or town (the German *burg*). Names ending in burgh, or borough, are found throughout Britain, from the coast of Devon to the Murray Firth. There are none in Cornwall, and very few (if any) either in Wales, or in the extreme north and west of Scotland.

Burn, or *bourn*, a stream.

Den, a valley, a pasture-ground. Names with this terminal are particularly numerous in Kent (Tenterden, &c.), and are also common in many other parts of England.

Ey, or *ea*, an island. Orkney, Guernsey, Anglesey, are examples. So also is Mersea Island, on the coast of Essex. *Eye*, or *ëe*, is also Scandinavian.*

Fleet, a shallow stream.

Ford, a place of passage over a stream, as Ox-ford, &c.: common in every part of England.

Ham, or *home*, an enclosed space, a home. One of the most common terminals of English geography (Nottingham, &c.).

Holme, a river-island (i.e. an island enclosed between the two arms of a stream). The Isle of Axholme, in Lincolnshire, is an example.

Holt, a wood; as in Alice Holt Forest, Hampshire.

Hurst, a wood, copse, or forest. Names compounded partly of hurst abound in Sussex (Midhurst, &c.) and the adjacent parts of Kent and Surrey — i.e. the tract of country known as the Weald, covered, in Saxon times, with almost unbroken forest.

Hythe, a low shore, a landing-place for ships.

Law, a detached mount or hill, frequent in lowland Scotland.

Ley, *lee*, or *lay*, (Saxon *leag*), a field or pasture.

Mark, or *march*, a boundary. The border-tract of Wales was known as the Welsh marches.

Stead, or *sted*, a place or station: the German *stadt*.

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people of Devon and Cornwall. Our earlier English names are in great measure based upon a river system. "History and tradition, supported by the great variety of Celtic words indicative of water, show that the haunts of the Celts, and their habits, were mainly connected with the streams"— Brewer: *Historical Atlas*. The river-names of Europe at large instance the same truth, upon a more extended scale.

* Thus, *Sudoreys*, the Southern Islands (or Hebrides), formerly united under the same sovereignty as the Isle of Man — whence the appellation "Sodor and Man."

Stoc, stoke, or *stow,* a place. As Basingstoke, &c.

Stour, i.e. stör or *great,* applied as an epithet of comparative size. Hence, in the case of rivers, *Stour,* the greater stream, by comparison with some adjacent stream of less magnitude.*

Thorp, or *throp,* a village. Milnthorp, &c. Thorp, or thorpe, is also Scandinavian.

Ton, or *tun,* an enclosed space, or town: all that is surrounded by a hedge or fence of any kind. It is in this restricted sense that the epithet of *town* is to be understood, in its early use.† A very large proportion of names within the Anglo-Saxon area exhibit this word, in various combinations, as Newton (or Newtown), Sutton, &c.‡

Weald, a wood.

Werth, or *worth,* a manor. As Rickmansworth, Isleworth, &c.

The following point to a Scandinavian origin: —

By, or *bye* (Danish), a dwelling. This form abounds in Lincolnshire, as in Grimsby, &c. It is also of frequent occurrence within the East and North Ridings of Yorkshire. Whitby and Hunmanby are examples in the latter county. Names ending in *by* are only of common occurrence within those two counties, and especially the former.§ To the southward, their limit is marked by the fens. The course of Danish inroad and settlement, towards the interior, may be traced by their occurrence. Derby and Rugby are instances.‖ *By* and *bigh* are found on, or not far removed from, the coast, upon the west as well as the east side of the island. Denbigh, in North Wales, and Tenby, in Pembrokeshire, are examples. Names ending in *by* are numerous in Cumberland and Westmoreland.

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* Several English rivers have the name of Stour. There is one in Kent; another on the borders of Essex and Suffolk; a third in Dorset; a fourth in Worcestershire; and a fifth on the border of Warwick and Gloucestershire.

† "It is thus (says Mr. Kemble) capable of being used to express what we mean by the word *town,* viz.: a large collection of dwellings; or, like the Scottish *town,* even a solitary farm-house."

‡ They are most numerous in the counties of York, Norfolk, Lancaster, Lincoln, Chester, and Somerset — least so in Cornwall, which has only eight, out of a total of nearly three thousand in England and Wales.

§ There are nearly 200 places ending in *by* (Grimsby, &c.) within the county of Lincoln, and half that number in the West Riding of Yorkshire. In Kent there is not one.

‖ Both Derby and Whitby had earlier Saxon names. The former was Northweorthing: the latter, Streoneshalch. Derby was one of the five burghs recovered by Ethelfleda, the daughter of Alfred, from the Danes.

Dale, a valley: the Scandinavian *daal*. This is found throughout the Scotch lowlands (Tweedale, &c.), and in the north and north-west of England, within the Cumbrian mountain region, the Pennine range, and the adjacent area. All the high valleys of the Cumbrian mountains are *dales*, as Borrow-dale, Wast-dale, &c.

Fell, a mountain; the Norwegian *fiell*, *fjiell*, or *field*. The Cumbrian mountains, and lowland Scotland, offer numerous examples, as Scaw-fell, Cross-fell, Crif-fell, &c.

Firth, an estuary: the Scandinavian *fiord*. The firths on the east side of Scotland are well known. The two or three that occur on the west coast of Britain adjoin the lowland area.*

Force, a waterfall: Scandinavian *foss*. Common in the lake district of Cumberland and Westmoreland, as Scale Force, Airy Force, &c.

Garth, a large farm. Several instances occur in Cumberland.

Gate, *gat*, *gap;* a way, road, path, or passage. Scarf-Gap and other examples occur in Cumberland.

Gill, a small stream. This term, of Icelandic origin, is common in the mountain district of Cumberland and Westmoreland.

Ness, *naes*, or *naze*, the nose or projection of the land. The Naze, in Essex, is an example. Ness is a well-known form in the geography of North Britain — confined, however, to the eastern coast.

Rigg, a mountain ridge. The Cumbrian lake-district again supplies examples, as Loughrigg, near Ambleside; and Castle-rigg, in the neighbourhood of Keswick.

Thwaite, an isolated piece of land. Names of places ending in *thwaite* are of frequent occurrence in Cumberland, as Esthwaite, &c.; also, though less numerously, in Yorkshire, chiefly within the West Riding.

Toft, a field.

With, a forest.

The following are of Latin derivation, and point to the period of Roman dominion:—

Chester, or *caster* (Saxon, *ceaster*), from *castrum*, a camp. The

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* The inlets on the west coast of North Britain are almost exclusively lochs: those on the east coast as uniformly *firths*. The former has always been, as it remains to the present day, the abode of an exclusively Celtic population, excepting towards the south, where Saxon and Scandinavian elements prevail. The Solway Firth has Criffel immediately adjacent to its waters; and other names of Scandinavian origin are found either on or near its shores, as Allonby, Flimby, &c.

lists of Roman towns given in a preceding chapter furnish numerous instances.

Coln (the Latin *colonia*), a colony; as Lincoln, &c.

Street (from the Latin *strata* — i.e. via strata, a paved way), often found in the case of villages that stand upon the line of the old Roman highways.

Wick, or *wich* (the Latin *vicus*), a village; as Greenwich, &c.*

An attentive examination of the respective proportions in which the prefixes and terminals given in the above tables are distributed over the map of Britain, with reference to their greater or less predominance in particular parts of the island, serves to illustrate, in no unimportant measure, the records of its earlier history. Celtic names predominate in the west and north, and are found scattered, in greater or less abundance, throughout the island, especially in the case of natural features, as rivers, mountains, and their enclosed valleys. The general predominance of Saxon names, as applied to the dwellings of man, is strikingly shown in the numerous places ending in *ton*, found nearly throughout South Britain and lowland Scotland — most numerously so within the more level regions of the east and centre, and becoming scarce within the hilly tracts that adjoin the western and south-western coasts. Thus, of names of towns and villages ending in *ton*, there are in the West Riding of Yorkshire, 172; in the North Riding, 180;† and in the East Riding, 126. In the county of Norfolk, there are, of places ending in *ton*, 192; in Suffolk, 98; in Lincoln, 140; in Nottingham, 94; in Northampton, 95; in Leicester, 101; in Staffordshire, 83; in Lancashire, 151; in Cheshire, 169; in Gloucestershire, 135; in Wiltshire, 107; and in the county of Somerset, 156. In Cornwall, on the other hand, there are but nine such names; and in Monmouthshire,

* Wich (or wyche), applied to the salt-springs, as in Nantwich, Northwich, Middlewich, and Droitwich, is a different word, and of Celtic origin.

† Such names are found most numerously within the vale of Cleveland — i.e. to the northward of the high region of the Eastern Moors, and towards the Durham border.

no more than 10. Names ending in *ton* are greatly more numerous than any other form of terminal which appears in Anglo-Saxon geography, and everywhere indicate the undoubted presence of a Teutonic race.*

Of names ending in *ham* we find a marked predominance in the eastern and south-eastern counties. Thus, of such names there are in Norfolk, 171 (Aylsham serves as an example); in Suffolk, 91; in Lincoln, 48; in Essex, 31; in Kent, 47; in Sussex, 36; in Surrey, 29. Of such names, Cumberland has only 6; Westmoreland, 5; Cornwall and Monmouth, each, 2; Stafford and Derby, each, 2; and Dorset only one.

Names ending in *hurst* are only common in Sussex, and the adjacent part of Kent. Of a total of 64 such names Sussex has 19; Kent, 10.

Names ending in *by*, as we have seen, predominate in Lincolnshire, and are numerous in Yorkshire, especially along the course of the Humber, the banks of the Ouse, and the affluents of that river. They also occur numerously in the county of Leicester, and are traced thence inland, though in diminishing numbers, through Nottinghamshire and Derbyshire on the one side, and the counties of Northampton and Warwick on the other. Upon the opposite side of the island, they are most common in Cumberland and Westmoreland, and may be followed thence southward, through Lancashire, into Cheshire. Very few occur in Wales, and those mostly on or near the sea-coast.†

* These and other statements of like kind are derived from a Table given in the instructive preliminary matter appended to the Population Returns of 1851. The terminals *ton* and *ington*, given in separate columns in the Table referred to, are added together for the purposes of the text. Similarly, *ham* and *ingham* are treated under one heading, though separate columns are there allotted to them.

† Tenby, on the coast of Pembrokeshire, is a familiar instance. Off the western coast of the same county is Skokholm Island. Estuaries, and the river-valleys to which they lead, and especially those belonging to the drainage of the Humber, the waters of which so often gave entrance to the predatory keels of the Northmen, are (says Dr. Latham, by whom this subject has been incidentally treated, in various works) the localities in which we should naturally expect to find their traces most abundant.

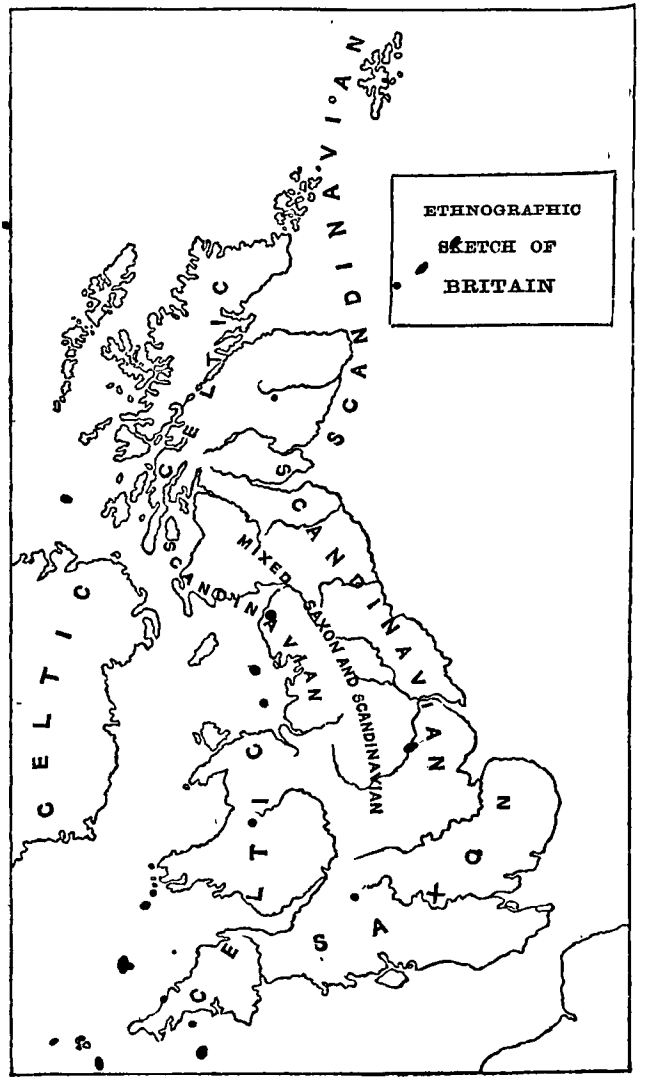
In the county of Lincoln, there are 195 such names; in the North Riding of Yorkshire, 95; in the East and West Ridings together, 65; in Norfolk, 22; in Leicestershire, 63; in the county of Northampton, 16; in that of Warwick, 3; in Nottingham, 15; in Derby, 5. In Cumberland, there are 42; in Westmoreland, 20; in Lancashire, 13; in the county of Chester, 9; in the whole of Wales, only 8. In the south-eastern, south-midland, western and south-western counties, they are scarcely met with. There is not a single one in the counties of Cambridge, Huntingdon, Bedford, Hertford, Middlesex, Surrey, Sussex, Southampton, Berks, Buckingham, Oxford, Worcester, Salop, Hereford, Wilts, Dorset, and Devon.

The aid to be drawn from considerations such as the above, in tracing the early settlement of nations, and in illustrating their movements during periods of early history, has been fully recognised. "Language (says Sir Francis Palgrave) adheres to the soil when the lips which spake are resolved in the dust. Mountains repeat and rivers murmur the voices of nations denationalised or extirpated in their own land."* The remark here made with reference to the geography of Norman France applies in greater or less measure to every country indicated on the map of the world, and to none more fully than to the countries of Western Europe. Thus, the geographical nomenclature of Spain would alone indicate the lengthened prevalence of Moorish dominion in the Iberian peninsula, even though written history were silent on the subject.†

Under the guidance of considerations of such a kind, derived from careful study of the names of places, and lending their aid to the known facts of history, we may venture to divide the map of Britain into a few great areas,

* History of Normandy and of England.

† The Arab *kasr*, or castle, *medinet*, or city, *wady*, a valley or watercourse, appear in the numerous kazars and medinas of Spanish geography. A like origin is shown in the characteristic prefix to the names of so many Spanish rivers, as Guadalete, Guadiana, Guadalquivir (i.e. *Wady al-Kebir*, the great river), &c.


ETHNOGRAPHIC
SKETCH OF
BRITAIN
SCANDINAVIAN
CELTIC
SCANDINAVIAN
MIXED SAXON AND SCANDINAVIAN
CELTIC
SAXON
CELTIC

within each of which a Celtic, a Saxon, or a Scandinavian element of population, is in greater or less measure predominant; bearing in mind, in doing so, *first*, that a Celtic element underlies the whole; and in the *second* place, that a Teutonic element, immediately succeeding the first-named, is spread with more or less of uniformity over all parts of the island, excepting the mountain districts of the west, which are almost exclusively Celtic. The divisions thus marked out correspond, for the most part, to the great natural features exhibited in the physical geography of the island. Thus: —

1. The CELTIC area comprehends all Scotland to the west of Strath-more; i. e. the whole of the High'lands, excepting where evidence of Scandinavian settlement is found along the shores of the North Sea. This is the region of *bens* and highland lochs, of great mountains (Ben More), of glens, straths, and mountain streams, at the confluence of which latter with one another, or at their outfall to the sea, the inhabitants early fixed their dwelling-places. Wales falls within this area, as also do Cornwall and the chief part of Devon.

2. The SAXON area, properly so called, includes all the eastern, southern, and central portions of England, from the coasts of Norfolk and Suffolk to the border of Devon, and from the Channel to the valley of the Trent. Over a large portion of this area — especially towards the west — Saxon and Celtic names are mixed.

3. The SCANDINAVIAN area includes the eastern coast-district of England, from the shores of the Wash northward, and the western side of the same country from the Dee to the Solway Firth: with the greater part of lowland Scotland, and a narrow strip along the eastern side of that country (between the mountain region and the sea) northward to the extremity of the island. It comprehends, besides, the Orkney and Shetland islands, the southern Hebrides, the islands in the firth of Clyde, the Isle of Man, and portions of the Welsh coast.

4. The inland portions of Durham, York, and Lancashire, with the adjacent counties of the north-midland district,—i. e. the extensive plain of York and the southwardly division of the higher grounds which we have called the Pennine range,—may be regarded as a mixed SAXON AND SCANDINAVIAN AREA.

SAXON TOWNS. — The following list of towns, mentioned in the Saxon Chronicle,* is derived from Kemble's "Saxons in England."

Aigeles byrig, now Aylesbury.
Acemannes ceaster, or Bathan-byrig, now Bath.
Ambres-byrig, now Amesbury.
Andredesceaster, now Pevensey.
Baddanbyrig, now Badbury (Dorset).
Badecanwyl, now Bakewell.
Banesingtun, now Bensington (Oxon).
Bebbanburh, now Bamborough.
Bedanford, now Bedford.
Beranbyrig (site unknown).
Bremesbyrig, now Bromsgrove?
Brunnanburh (site unknown; perhaps Burgh, in Lincolnshire?).
Brycgnorth, now Bridgenorth.
Bucingaham, now Buckingham.
Cantwarabyrig, now Canterbury.
Cirenceaster, now Cirencester.
Cissanceaster, now Chichester.
Cledemutha (site unknown).
Colnceaster, now Colchester.
Coludesburh, now Coldingham.
Cyppenham, now Chippenham.
Deoraby, now Derby.
Dofera, now Dover.
Dorceceaster,† now Dorchester (Oxford).
Dorceceaster, now Dorchester (Dorset).
Eadesbyrig, now Eddisbury (Cheshire)?
Eligbyrig, now Ely.
Eoforwic, now York.
Exanceaster, now Exeter.
Exanmutha, now Exmouth.
Genisburuh, now Gainsborough.
Glæstingaburh, now Glastonbury.
Gleawanceaster, now Gloucester.
Hæstingas, now Hastings.
Hagustaldesham, or Hagstealdesham, now Hexham.
Hamtun, now Southampton.
Hamtun, now Northampton.
Heanbyrig, now Hanbury (Worcester).
Heortford, now Hertford.
Hereford, now Hereford.
Hrofesceaster, now Rochester.
Huntenatun,‡ now Huntingdon.

* The Saxon Chronicle extends over the period between the Roman invasion and the year 1154. The authorship of its earlier portions is generally referred to the time of Alfred.

† Dorchester, a few miles south-east of Oxford, was in Saxon times the site of a bishop's see, removed to Lincoln in the reign of William I.

‡ That is, as the name implies, originally a town or enclosed dwelling of hunters: in process of time, a city.

Judanbyrig, now Jedburgh?
Legaceaster (Caer-lejeon), now Chester.
Legraceaster, now Leicester.
Lindicoln, now Lincoln.
Lundenbyrig, or Lundenwic, now London.
Lygeanbyrig, now Leighton-buzzard.
Mameceaster, now Manchester.
Mealdon, now Maldon (Essex).
Medeshamstede, now Peterborough.
Meldumesbyrig, now Malmesbury.
Merantun, now Merton (Oxford).
Middeltun, now Middleton (Essex).
Northamtun (or Hamtun), now Northampton.
Northwic, now Norwich.
Oxnaford, now Oxford.
Posentesbyrig (site unknown).
Rædingas, now Reading.
Runcofa, now Runcorn.
Sandwic, now Sandwich.
Scærgeat, now Scargate.
Scheaftesbyrig, now Shaftesbury.
Sceobyrig, now Shoebury (Essex).
Seletun, now Silton (Yorkshire).
Searoburh, now Salisbury.
Snotingaham, now Nottingham.
Soccabyrig, now Sockburn (Durham).
Stæfford, now Stafford.
Stanford, now Stamford.
Sumerton, now Somerton (Oxford).
Suthbyrig, now Sudbury (Suffolk).
Swanawic, now Swanwick (Hants).
Temesford, now Tempsford (Bedford).
Thelweal, now Thelwall (Cheshire).
Thetford, now the same.
Tofeceaster, now Towcester.
Tomaworthy,* now Tamworth.
Wæringawic, now Warwick.
Weardbyrig, now Warborough (Oxford).
Wygingamere (site unknown). Probably in Hertfordshire.
Wygornaceaster, now Worcester.
Whitgabyrig, now Carisbrook.
Wiltun, now Wilton.
Wintanceaster, now Winchester.
Withan, now the same (Essex).

It is not to be imagined (says Mr. Kemble) that this list nearly exhausts the number of fortresses, towns, and cities extant in the Saxon times. It offers, however, many features of interest to the student of English topography in the present day, and its comparison with the list of principal towns in England, as they now exist, may serve to illustrate many truths connected with the re-distribution of the chief seats of population and social importance, consequent upon the modern growth of manufactures, and connected with the numerous points of difference between the social and political life of the ninth and the nineteenth centuries.

* A favourite residence of the Mercian kings.

CHAPTER VI.

NORMANDY.

GEOGRAPHY OF NORMANDY.—NORMANDY is a considerable province, situated upon the southern side of the channel by which England and France are divided. It forms a part of the last-named country, and immediately fronts the south coast of England.

Normandy stretches along the shore of the Channel* for a length of about 300 miles—measuring along the principal indentations of the coast—and reaches inland to an average distance of about 80 miles. Upon the east, the little stream of the Bresle divides it from Picardy; upon the west, it reaches to the head of a deep bight, formed where the line of coast, after trending for some distance in the direction of north and south, runs nearly due west (W. long. 1° 30′), and where the province of Bretagne begins. A line, for the most part artificial, forms its inland frontier, on the side of Maine, Perche, and the Isle de France.

The two most marked features of the coast of Normandy are, the peninsula which terminates in the capes of Barfleur and La Hague, and the estuary of the Seine. The former is known (in modern geography) as the peninsula of Cotentin. This projects considerably beyond the general line of coast, and fronts to the westward the dangerous waters—thickly studded with rocks and islets, and conspicuous for the rapidity and strength of their tidal currents—by which Jersey, Guernsey, and the adjacent islands are surrounded. A ridge of rocky and moderately elevated

*That is, the English (or British) Channel, of British geography; La Manche (or the *Sleeve*) of the French.

ground extends through this peninsula, terminating in its north-westerly point, Cape la Hague.

The lower course of the river Seine, from the sea upwards to the tributary stream of the Epte, within less than forty miles of Paris, is within Normandy. Of numerous smaller streams, the Arques, to the eastward of the Seine, the Dives, the Orne, and the Vire, to the westward of that river, are the most noteworthy. All of these are mere rivulets, compared to the Seine; the Orne, which has a length of not much less than ninety miles, and which has the city of Caen upon its banks, is the most considerable of them.

In point of superficial aspect, soil, and climate, Normandy is among the most favoured portions of France. The valley of the Seine is diversified by undulating grounds, of moderate height, which in parts make near approach to the banks of the stream, and the province exhibits throughout a pleasing variety of surface.

Among the numerous towns and villages of Normandy, *Rouen* is by much the most considerable. It has in the present day upwards of 100,000 inhabitants. The importance of Rouen dates from an early period, and was doubtless due to its admirable situation, well adapted alike for the purposes of commerce and of defence against a foe. This, however, had not saved it from the successful assault of the Northmen, who added to its previous extent, and made it their metropolis. Rouen stands on the right bank of the Seine, 90 miles above the sea. It represents the Rotomagus of the Roman period.

Harfleur and *Honfleur*, now unimportant fishing towns, situated upon the opposite banks of the Seine, a short distance above its embouchure, possess some historical note, but both are in the present day greatly inferior in size and population to the flourishing seaport of *Havre* (properly le Havre de Grâce) at the mouth of the river. Havre ranks third amongst the commercial cities of modern France, and has 64,000 inhabitants. *Fécamp* and *Dieppe* are seaport towns, on the line of coast which stretches north and east from the Seine: Dieppe was early conspicuous as a place of trade.

Caen, an inland city, situated on the Orne (68 miles W.S.W. of Rouen), is second in size among the cities of Normandy. It ranked in former times as the capital of Lower Normandy, as the western division of the duchy is called. In the present day, Caen has

33,000 inhabitants. *Bayeux*, *Lisieux*, *Falaise*, and *St. Lo*, are among the smaller but thriving towns within Lower Normandy. Falaise was the birthplace of the Conqueror: the church of St. Stephen, in the city of Caen — his favourite place of residence — received his body after death. *Tenchebray*, formerly a place of great strength, before the walls of which Robert, Duke of Normandy, was defeated by his brother Henry (1106), is in the southern part of the duchy, 34 miles to the S.W. of Caen, and within the modern department of Orne, near its north-western border. Both Bayeux and Lisieux were of early origin, and had existed during the times of Roman dominion in Gaul.* *Evreux*, in the extreme south-east of the duchy (57 miles W.N.W. of Paris), is also of ancient date, and had witnessed the ferocity and strength of Norman valour, when sacked by the northern invaders in 891. Evreux has now a population of 13,000. *Alençon* (pop. 13,500), on the stream of the Sarthe, is within the southern border of Normandy, on the frontier of Maine.

Avranches, *Coutances*, *Valognes*, *Cherbourg*, and *Barfleur*, belong to the extreme west of Normandy. The second of them gives its name to the district of Cotentin, of which it was the capital. Cherbourg, on the northern shore of the Cotentin peninsula, has become distinguished as one of the chief naval arsenals of modern France. But the importance of Cherbourg is of recent growth: Barfleur, now an insignificant place, with a harbour that (partly from natural causes) has become closed to all but small fishing vessels, was long the chief port of Normandy, and became the most frequented point of intercourse between England and that province.†

THE NORMANS.—It was from the tract of country above referred to, that the Norman army, under Duke William (afterwards William I.), came to England, and defeated the Saxons in the battle of Hastings. The kings of England, for nearly the succeeding century and a half — i. e., from William I. to John — ruled also over Normandy, and the history of our country during that period is closely mixed up with that of the Norman people and the land to which they had given their name.

* The well-known Bayeux tapestry, which represents the various scenes in the conquest of England by the Normans, attests the skill of Norman female handicraft — (it is said to have been executed by the fingers of Matilda, wife of the Conqueror, and her attendant maidens) — and has given the town its best known distinction in modern times.

† It was upon the rocks off Barfleur that, in 1120, Prince William, the only son of Henry I., perished in the disastrous shipwreck of the Blanche nef.

Who were the Normans? Whence had they sprung? The Normans were *Northmen*—that is, natives of Scandinavia, the region whence sea-warriors and pirates, from an early period, had carried their ravages over the whole seaboard of western Europe. In the closing years of the ninth century, a party of these hardy northern rovers, under the leadership of Rollo, a Norwegian chieftain*, had sailed up the stream of the Seine, and, carrying their devastations to the very walls of the French capital, had obtained from the French king (Charles the Simple) a permanent cession of the fertile tract of country then known as Neustria. This province thence acquired, from themselves, the name of Normandy. The hardy Northmen, settled in this attractive region, under a warmer sky than that of their early home, adopted the usages, religion, and speech of the conquered race among whom they had come to dwell. They cultivated arts and letters, assumed a refinement of dress and manner—in superior degree to even that by which the French nation in general were distinguished; encouraged agriculture, trade, and the ordinary industrial pursuits of civilised life. Norman French became the most refined of modern languages, and Rouen, where the Norman dukes held their court, was the centre of literature and the polite arts of life. The hereditary valour of the Norman race was at the same time encouraged and maintained, and Norman skill and valour were conspicuous in every military contest.

Five generations of Northmen had been settled in the fertile province lying on the south of the Channel, when William duke of Normandy resolved on the conquest of England. The Normans were then among the foremost people of Christendom, and their influence was widely felt among surrounding nations. "Before the conquest, English princes received their education in Normandy; English sees and English estates were bestowed on Normans. The

* The Hrolf-ganger of Scandinavian legendary story—the latter epithet indicative of his physical prowess.

French of Normandy was familiarly spoken in the palace of Westminster." (Macaulay, *Hist. of England.*)

Edward the Confessor, the last reigning monarch of the Anglo-Saxon line of princes, was intimately connected, by family ties, with the Norman dukes. His father Ethelred had married the sister of Duke Richard of Normandy (the second of that name), and Edward himself, sent while in his boyhood to the court of his uncle for safety, while England was ravaged by the Danish king Sweyn, had passed twenty-seven years of his life in exile there. During the greater portion of those years, the sceptre of England was wielded by the vigorous hand of Canute, the Danish (as well as the English) king. Edward was therefore cousin to the Norman duke William, the natural son of Duke Robert and the grandson of Duke Richard II. Harold, the second son of Earl Godwin, who upon the Confessor's death stepped into the vacant throne of England, had no other connection with the royal family than was derived from the fact of Edward's marriage with his sister Editha.

William had succeeded to the inheritance of the Norman duchy in 1034. During a visit paid to England in 1051, he had caused himself to be named in the Confessor's will as heir to the Anglo-Saxon throne. Fortified by the sanction of the Church of Rome, he determined to make good his claim by force of arms.

The armament of the Norman Duke assembled at the mouth of the little river Dives, which, as we have seen, enters the Channel a short way to the eastward of the Orne.* During a month after it had been brought together, the winds were contrary and the Norman ships were detained in port. "Then a southern breeze carried them as far as the roadstead of St. Valery, at the mouth of the river Somme: there the bad weather recommenced, and it was necessary to wait some days. The fleet anchored, and the troops encamped upon the shore, greatly incommoded by the rain, which did

* A monument of recent erection (1861) at the little port of Dives, situated at the mouth of the river, commemorates the event.

not cease to fall in torrents."* William frequently watched the movements of the wind, as indicated by the weather-cock which surmounted the bell-tower of the Church of St. Valery. At daybreak of the 27th September, the sun shone out in all its splendour, and the wind was favourable. The camp was immediately raised, and the expedition sailed before sunset.

The Norman armament landed on the coast of Sussex, at Bulverhithe, between Pevensey and Hastings, on Sept. 28th, 1066. William occupied with his forces the old Roman castle of Pevensey.

The battle of Hastings was fought on October 14th, upon the ground now covered by the small town of *Battle*, a few miles to the north-west of Hastings. The place had previously been known by the name of Senlac. William erected there a magnificent abbey, in grateful commemoration of the great victory which had been vouchsafed to his arms. This was called, in the Norman (i.e. French) language, "l'Abbaye de la Bataille," or Battle Abbey.

The battle of Hastings decided the fate of the English nation. Within little more than two months of its date, William entered London, and on the ensuing Christmas day he was crowned King of England within the Abbey Church of Westminster—then a recent erection, due to the piety of Edward the Confessor.

Not that the whole of England—or even the larger portion of it—at once submitted to the victor of Hastings. Many a contest for Saxon liberty was maintained, in different parts of the kingdom, but in vain. One strong city after another—Exeter, Oxford, Warwick, Leicester,

* Thierry: Hist. of Conquest of England by the Normans. Two small towns bearing the name of St. Valery are found upon the coast of northern France—one of them situated a short distance to the westward of Dieppe (distinguished as St. Valery *en Caux*, from the old provincial district of that name), the other lying at the mouth of the river Somme. The last-mentioned—St. Valery sur Somme—was beyond the limits of Normandy, but there is no doubt, notwithstanding, that it represents the port from which the armament of William sailed.

Nottingham, York — yielded to the arms of the Conqueror. The temporary success of the insurgent Northumbrians, aided by a Danish force, in 1069, gave the Norman King a pretext for laying utterly waste, with remorseless barbarity, the extensive vale of York, the most fertile portion of the north of England. "From York to Durham not an inhabited village remained. Fire, slaughter, and desolation, made a vast wilderness there, which (wrote the monkish historian, William of Malmesbury, eighty years after the event) continues to this day." From Durham north to Hexham, from the Wear to the Tyne, the same work of destruction was pursued — with pestilence and famine as the natural result.

The swamps of Cambridgeshire and the adjoining counties — i.e. the district of the fens — were the localities within which Saxon opposition to Norman rule was longest maintained, and with largest measure of success. The "camp of refuge," established by the brave Hereward, within the Isle of Ely, was only reduced by means of a severe blockade maintained by the Norman King until its defenders were brought to the extremity of famine. The abbeys of Ely, Peterborough, Thorney, and Croyland, stood within or adjacent to this tract of country, and conferred something of sanctity upon it in Saxon regards.

One of the most noteworthy events of the Conqueror's reign was the compilation of Domesday Book — a general survey of the lands of England which he caused to be made. The compilation of Domesday was commenced in 1084, and completed in 1086, the information which it embodies having been collected by justiciaries or commissioners appointed for the purpose. The results attained by this laborious undertaking were — an exact knowledge of the possessions of the Crown: a complete list of all landowners: a means of exactly ascertaining the military strength of the country: a knowledge of the extent to which the revenue might, if necessary, be increased: and, lastly, the possession

of a register of appeal in cases of disputed property. Domesday was thus not a Census, nor does it even furnish the material for any precise estimate of the population at the period, though it includes incidentally many of the details which a modern census embraces.*

Five of the six northern counties of England — Northumberland, Durham, Cumberland, Westmorelafid, and Lancashire, together with Wales and Monmouthshire, are not comprehended within the records of Domesday Book. The total amount of population which it gives for the counties, with these exceptions, is as follows:—

Bedfordshire	3,875	Herefordshire	5,368
Berkshire	6,324	Hertfordshire	4,927
Buckinghamshire	5,420	Huntingdonshire	2,914
Cambridgeshire	5,204	Kent	12,205
Cheshire	2,349	Leicestershire	6,772
Cornwall	5,438	Lincolnshire	25,305
Derbyshire	3,041	Middlesex	2,302
Devonshire	17,434	Norfolk	27,087
Dorsetshire	7,807	Northamptonshire	8,441
Essex	16,060	Nottinghamshire	5,686
Gloucestershire	8,366	Oxfordshire	6,775
Hampshire	9,032	Rutlandshire	862

* The mode of compiling Domesday was this. The inquisitors, upon the oath of the sheriff, the lords of each manor, the presbytery of every church, the reeves of every hundred, the bailiff and six villeins of every village, were to enquire into these several particulars; the name of the place, who held it in the time of King Edward, who was the present possessor, how many hides there were in the manor, how many carrucates in the demesne, how many homagers, how many villeins, how many cotarii, how many servi, what free men, how many tenants in soccage, what quantity of wood, how much meadow and pasture, what mills and fish-ponds, how much added or taken away, what the gross value in King Edward's time, what the present value, and how much each freeman and socman has or had. All was to be triply estimated — first, as the estate was held in the time of the Confessor; second, as it was bestowed by King William; thirdly, as its value stood at the formation of the survey. The jurors were also to state whether any advance could be made in this value — an important instruction, which reveals what was no doubt the main purpose of the whole work. The descriptions of land mentioned in Domesday are—terra, arable land; planum, open country; silva and nemus, wood; pasuagium, feeding of hogs; pastures, pasture; pratum, meadow land; maresc or mora, marsh or fen; vineyards, of which 38 or more are enumerated, few of the great monasteries appearing to have been without them; with mills, salt-work, iron and lead works, stone quarries, and fisheries. — (Rev. Thos. Hugo, in paper read before London and Middlesex Archæolog. Society, 1860.)

Shropshire	5,080	Sussex	10,410
Somersetshire	13,764	Warwickshire	6,574
Staffordshire	3,178	Wiltshire	10,150
Suffolk	20,491	Worcestershire	4,625
Surrey	4,383	Yorkshire	8,055

The numbers here given cannot be taken as representing the actual total populations of the several counties, in the time of the Conqueror. The low number given for Middlesex, the inhabitants of the metropolis being evidently not taken into account, sufficiently shows this. Yet the numbers given for the different counties no doubt represent correspondent elements in each, and their comparison affords many points of instruction. The counties of Lincoln and Norfolk seem to have had then a larger population than any others. The small number given for the county of York is accounted for by the desolation which that portion of England had recently undergone at the hands of the infuriated king.

The towns were then of small size. The city of York appears from the statements in Domesday to have contained only 1,418 families. Norwich had 738 houses; Exeter 315; Ipswich 538; Northampton 60; Hertford 146; Canterbury 262; Lincoln 1,070.* Norwich, in the time of the Confessor, had been one of the chief cities in the kingdom. York is estimated to have had 10,000 inhabitants at the time of the Conquest. London had probably at least three times that number.

The Anglo-Saxons seem to have paid comparatively little regard to walled towns. The fortified cities of the Roman period had in many instances been allowed to fall into decay. A certain rude strength belonged to the dwelling of the Saxon landowner—generally a building of wood, surrounded by a ditch or moat, and around which the hovels of his cotarii, or vassals, were clustered.

The life of the Saxons was, however, essentially a country

* See Hume: Hist. of England, Appendix I. The figures given in the above list of counties are derived from the notes accompanying Professor Brewer's Atlas of History and Geography.

life, and one to the requirements of which the military appurtenances of the fortresses which the Romans had left behind them were ill adapted. The strength of the Saxon nation was not employed, as that of the Roman legionaries had been, in the construction of great military works or in the defence of castellated walls. The towns of the Saxons had (says Mr. Kemble)* a totally independent origin, and one susceptible of an easy explanation. "The fortress required by a simple agricultural people is not a massive pile with towers and curtains, devised to resist the attacks of reckless soldiers, the assault of battering-rams, the sap of skilful engineers, or the slow reduction of famine. A gentle hill crowned with a slight earthwork, or even a stout hedge, and capacious enough to receive all who require protection, suffices to repress the sudden incursions of marauding enemies, unfurnished with materials for a siege or provisions to carry on a blockade. Here and there such may have been found within the villages or on the border of the Mark, tenanted perhaps by an earl or noble with his comites, and thus uniting the characters of the mansion and the fortress: around such a dwelling were congregated the numerous poor and unfree settlers, who obtained a scanty and precarious living on the chieftain's land; as well as the idlers whom his luxury, his ambition, or his ostentation attracted to his vicinity. Here too may have been found the rude manufacturers whose craft supplied the wants of the castellan and his comrades; who may gradually and by slow experience have discovered that the outlying owners also could sometimes offer a market for their productions; and who, as matter of favour, could obtain permission from the lord to exercise their skill on behalf of his neighbours. Similarly around the church or the cathedral must bodies of men have gathered, glad to claim its protection, share its charities, and aid in ministering to its wants."

There remain in the present day but few evidences of the interior arrangements, as to local distribution of buildings,

* The Saxons in England: book 2, chap. vii.

by which the towns of our Anglo-Saxon forefathers were distinguished. Some few hints, however, are supplied, which enable us to form a faint image of what an Anglo-Saxon town may have been. "It is probable (says the authority already quoted) that the different trades occupied different portions of the area, which portions were named from the occupations of their inhabitants. In the middle ages these several parts of the city were often fortified and served as strongholds, behind whose defences, or sallying forth from which, the crafts fought the battle of democracy against the burgesses or the neighbouring lords. We have evidence that streets, which afterwards did, and do yet, bear the names of particular trades or occupations, were equally so designated before the Norman Conquest, in several of our English towns. It is thus only that we can account for such names as Fellmonger, Horsemonger and Fleshmonger, Shoewright and Shieldwright, Tanner and Salter Streets, and the like, which have long ceased to be exclusively tenanted by the industrious pursuers of those several avocations. Let us place a cathedral and a guildhall with its belfry in the midst of these, surround them with a circuit of walls and gates, and add to them the common names of North, South, East and West, or Northgate, Southgate, Eastgate and Westgate Streets—here and there let us fix the market and its cross, the dwellings of the bishop and his clergy, the houses of the queen and perhaps the courtiers, of the principal administrative officers and of the leading burghers—above all, let us build a stately fortress, to overawe or to defend the place, to be the residence of the geréfa and his garrison, and the site of the courts of justice—and we shall have at least a plausible representation of a principal Anglo-Saxon city."

Indifference to walled cities, and their comparative neglect as an element of national strength, has always been, as it probably always will be, an element of the Anglo-Saxon character. Some of the Saxon towns, however, were fortified. The Normans built castles in every corner of the

island; but as the Saxon element in our population regained its supremacy, many of these fortresses were either intentionally dismantled, or allowed to fall into decay. In the early part of the thirteenth century there are said to have been upwards of eleven hundred castles in England.* In Shropshire alone there were twenty-four. These were chiefly border fortresses, built as a means of protection against incursions along the extended line of the Welsh frontier. Only two of the number were in existence when Domesday was compiled, and none were built after the conquest under Edward I.

* Hume, ii. 156.

CHAPTER VII.

CONTINENTAL DOMINIONS OF THE NORMAN KINGS OF ENGLAND

THE victory of Hastings placed a Norman duke upon the English throne. During the ensuing century and a half, England and Normandy were ruled by one sovereign; other portions of continental territory, greatly more extensive in area than Normandy, were long under the same common sway. The so-called history of England, during this period, is in great measure the narrative of events that occurred upon the French side of the Channel. It hence becomes necessary, alike for the purposes of history and of geography, to look at those portions of modern France which were so long attached to the crown of England.*

FRANCE.—In the early part of the ninth century, the whole of what constitutes modern France had fallen within the empire of Charlemagne. But the division of power which took place upon the death of that monarch, and the struggles of war and policy which everywhere ensued, speedily broke up in minute fragments the vast aggregate of provinces which his empire had embraced. France exhibits a conspicuous instance of this division. In the early part of the tenth century, the fairest portion of

* "During a century and a half which followed the Conquest (says Macaulay), there is, to speak strictly, no English history." The Norman kings of England rose indeed to an eminence which became the wonder and the dread of neighbouring nations. But the English nation had little share in this greatness. "The Conqueror and his descendants to the fourth generation were not Englishmen; most of them were born in France; they spent the greater part of their lives in France; their ordinary speech was French; almost every high office in their gift was filled by a Frenchman; every acquisition which they made on the continent estranged them more and more from the population of our island."

FRANCE
in the middle of the IIth Century
(1066)

FRANCE
in the later half of the 12th Century
(Henry 2nd 1154-1189)

FRANCE
in the time of Edward III.
(Treaty of Bretigny 1360)

FRANCE
at the accession of Henry VI.
1422

W. Hughes del.

Longman & Co.

E. Weller sc.

Neustria was given up to the piratical warriors of the north. Normandy became thence a distinct state, with only feudal dependence upon the crown of France. Burgundy and Aquitaine became sovereign duchies less than half a century later in date. Lorraine followed. Flanders in the north, and Champagne in the north-east, constituted in like manner separate earldoms. The people of the north-western peninsula, Brittany, had from the time of the Merovingian kings been governed by their own dukes. In the south, Gascony and Toulouse became in great measure independent of the crown, the former under a ducal house, the latter under the powerful counts of that name. The country lying east of the Rhone, between that river and the crest of the Alps, was formed into two kingdoms, afterwards united into a single kingdom, which derived its name from the city of Arles. The Royal Domain of France comprehended, in the eleventh century, only the middle portions of the valleys of the Seine and Loire, i.e. the tract known as Isle de France, with the adjacent provinces of Orleanais, Berry, and Touraine.* It was not until the close of the fifteenth century that, with the break up of the feudal system, the different appanages of the French crown were united, and France became consolidated into a great kingdom.

The portions of France that, under various tenures, and at various periods between the date of the Norman Conquest and the reign of Edward III., were attached to the

* Hallam: Middle Ages. At the accession of Hugh Capet (987) six great vassls divided between them the chief part of the kingdom, and controlled the authority of the crown. These were "the Count of Flanders, whose fief stretched from the Scheldt to the Somme; the Count of Champagne; the Duke of Normandy, to whom Brittany did homage; the Duke of Burgundy, on whom the Count of Nivernais seems to have depended; the Duke of Aquitaine, whose territory, though less than the ancient kingdom of that name, comprehended Poitou, Limousin, and most of Guienne, with the feudal superiority over the Angoumois and some other central districts; and, lastly, the Count of Toulouse, who possessed Languedoc, with the small countries of Quercy and Rouergue, and the superiority over Auvergne."

English crown, consisted of:—1. NORMANDY; 2. MAINE; 3. ANJOU; 4. TOURAINE; 5. POITOU; 6. AQUITAINE (comprehending, with the extensive provinces of Guienne and Gascony, the adjoining districts of Saintonge, Angoumois, Limousin, the Marche, and Auvergne); and 7. BRITTANY. These territories, even excluding the last named, the dependence of which, except for a brief period, was merely nominal, together comprehend more than half the area of modern France.

1. NORMANDY, the geographical features of which have been already described, was the inheritance of Duke William, the victor of Hastings, and the first of the Norman kings of England. It remained attached to the crown of England for nearly a century and a half, when (A.D. 1207), during the imbecile reign of the English king John, it was reunited to the French crown by the successful arms of Philip Augustus, who then sat on the throne of France. The city of Rouen, besieged by the French king, had opened its gates in 1205, and the example was shortly followed by other places within the duchy. France thus regained possession of the fertile province which above three centuries previously had been won by the valour and fortune of Rollo, the Scandinavian chieftain and pirate.*

2. The province of MAINE lies immediately to the south of Normandy. It slopes towards the basin of the Loire, and is watered by the streams of the Sarthe and Mayenne, tributaries of that river. Maine, previously ruled by its independent counts, had acknowledged the sovereignty of the Norman duke some years prior to the date of the invasion of England, and was afterwards (in 1073), completely subdued by the Norman arms. It passed, with Normandy itself, to the inheritance of the successors of

* The victories of Henry V., two centuries later, again attached to the crown of England all (and more than all) the continental dominions of the early Norman kings. This re-annexation was, however, of comparatively brief duration, and belongs altogether to a later period of English history.

William I. upon the English throne. Maine followed the fortunes of Normandy, and, with that duchy, was lost to the English crown during the reign of John.

The most important place in Maine, and its former capital, is *Le Mans*, an ancient town, with 27,000 inhabitants, situated on the river Sarthe, in the centre of the province. It was the birth-place of Henry II. *Laval* and *Mayenne*, both situated on the Mayenne, are small towns—the former of some historical note—within the province.

3. ANJOU, to the southward of Maine, is watered by the river Loire, which flows through its midst. It extends along the banks of that river for a distance of 70 miles. Upon the right (or northern) bank of the Loire, the lower portions both of the Sarthe and the Mayenne have their course within Anjou.

The earldom of Anjou was the inheritance of Henry II., the first Plantagenet king of England.* With the accession of that able sovereign to the throne, Anjou (and with it the dependent province of Touraine) became added to the other continental possessions of the English kings. Like the provinces already noticed, it was lost under the feeble reign of John.

Angers, a manufacturing city of modern France, with 43,000 inhabitants, was the former capital of Anjou. It stands on the Mayenne, a short distance below its junction with the Sarthe, and 5 miles above the point where the united streams fall into the Loire. Angers has considerable historic note. One of its hospitals owes its foundation to Henry II. Its university, founded in the thirteenth century, and destroyed during the revolution, long enjoyed considerable reputation. Margaret of Anjou, the masculine consort of Henry VI. of England, was interred within the cathedral of Angers.

4. TOURAINE lies to the eastward of Anjou. Like that territory, it is watered by the Loire, which receives the tributary streams of the Cher, the Indre, and the Vienne, within its limits. Touraine is highly distinguished for its fertility, and is regarded as one of the most favoured portions of France. It constituted a dependent possession

* Henry's father was Geoffrey, Earl of Anjou, who had married Matilda, the daughter of Henry I.

of the counts of Anjou, and followed the fortunes of that territory in its relationship with the English crown.

Tours, which gave its name to the territory, is historically among the most important of French cities. It enjoys a considerable share in the manufactures and commerce of modern France, and has above 33,000 inhabitants. Tours stands on the south bank of the Loire, upon a tongue of land which lies between that river and its tributary the Cher. Its silk manufactures, though flourishing, are now much less considerable than at a former period.* Tours was the chief place within the district of the Turones, a Gallic nation, and became afterwards the metropolis of the Roman province of Lugdunensis Tertia. Its cathedral of St. Martin (of which only two towers remain) was one of the chief ecclesiastical edifices of the sixth century. Luitprande, the Queen of Charlemagne, was interred within it. Plessis-les-Tours, the famous residence of Louis XI. of France, is within a short distance of this city. *Lochs*, a small town lying 14 miles SE. of Tours, is of some historical note.

Anjou and Touraine, joined to Normandy and Maine, formed a considerable accession to the extent of continental territory which belonged to the Norman kings of England. But these provinces by no means represent the whole extent of the additions which the first Plantagenet king made to the territory over which his predecessors on the English throne had ruled. Little more than a year previous to his becoming, by the death of Stephen, undisputed sovereign of England, Henry had married Eleanor, the divorced queen of Louis VII. of France, and with her had acquired sovereign rule over the extensive earldom of Poitou, and the yet larger duchy of Aquitaine, both of which belonged to her by inheritance from her father. These territories comprised the whole tract reaching from the Loire to the foot of the Pyrenees, and from the Bay of Biscay to the mountains of Forez.†

* The revocation of the edict of Nantes (A.D. 1685) deprived Tours of nearly half its inhabitants, and of nearly all its manufacturing industry. The silk-weavers of Tours colonised Spitalfields.

† With Normandy and England added to his prior possessions on the continent, Henry II. became the most powerful prince of his age. The continental portion of his dominions was more important, in many regards, than the insular portion: for Normandy, Anjou, Poitou, and Aquitaine, were together of larger area than England, and probably had

5. POITOU.—Poitou is an extensive tract lying south of the Loire. The waters of the Bay of Biscay form its limit on the west: these are distant by above a hundred miles from its inland frontier, to the eastward. The river Vienne, which joins the Loire, and the two streams known by the name of Sèvre—one of them an affluent of the lower Loire, the other flowing, with a direct westerly course, into the Bay of Biscay—form its principal inland waters.

The old city of Poitiers, standing beside the little stream of the Clain, which joins the Vienne, gave its name to the province. Poitiers represents the Limonum of the Romans, the capital of the Pictavi, and possesses the remains of a vast Roman amphitheatre, capable of accommodating 20,000 persons. Its cathedral dates from the year 1152, and was founded by Henry Plantagenet (Henry II). Poitiers is most familiarly known in history from the victory which (A.D. 1356) the Black Prince gained in its vicinity over the French king.* In modern times, Poitiers is only of importance as the capital of a department: it has above 25,000 inhabitants. The town of *Mirebeau*, a small place, sixteen miles to the NW. of Poitiers, posesses historic note. It was while engaged in the siege of its castle that the hapless Prince Arthur, the heir of Brittany and claimant of the English throne, fell into the hands of his savage uncle John (A.D. 1202). *Niort* and *Fontenay*, both within Poitou, are of smaller size: the former, situated 42 miles SW. of Poitiers, is of some historic note, and was at one time the residence of Eleanor of Aquitaine, afterwards Henry II.'s queen.

Poitou, like the other English possessions in France, was lost under King John. The victories of Edward III. and the Black Prince recovered it to the English crown, to which it then remained attached until the final termination of English dominion in France under the reign of Henry VI. (A.D. 1452).

6. AQUITAINE.—The duchy of Aquitaine, during a large portion of the middle ages, embraced a territory of vast extent, in the south-west of France, and stretching

besides a larger amount both of population and wealth. In truth, England really became, under Henry II., even more fully than under his Norman predecessors on the throne, an appanage of Norman France, and, though giving its name to the sovereignty of the whole, was itself of subordinate importance.

* It was on the plains between Tours and Poitiers, but nearer to the latter than to the former of those cities, which are upwards of seventy miles apart, that Charles Martel gained his famous victory over the Saracens, A.D. 732.

thence far into the central regions of that country. Gascony and Guienne, with the less extensive dependent provinces of Auvergne, the Marche, Limousin, Angoumois, Saintonge, and Aunis, fell within its limits. Within a range of country so extensive, the greatest diversity of features is found. Auvergne, Limousin, and the Marche, are a pastoral region, in great measure covered with wooded hills, and within which the principal streams that contribute their waters to the channels of the Loire and the Garonne have their origin. The Allier, the Cher, the Creuse, and the Vienne, all of which have a direction to the north and west, and finally join the Loire, flow in part through this territory. The Dordogne, Lot, and Tarn, which take their courses down its south-westwardly slope, belong to the basin of the Garonne.

But a still larger portion of Aquitaine consists of the less elevated (though for the most part undulating and diversified) region which is watered by the lower Garonne, the Dordogne, and, further to the northward, the Charente. To these rivers must be added the Adour, in the extreme south-west of the duchy.

The Garonne rises in the Pyrenees, and afterwards takes its course through the sunny plains of Gascony and Guienne — excepting only where its most eastwardly bend penetrates, for a brief interval, the frontier of Languedoc. The united waters of the Garonne and Dordogne, which join about fifty miles before reaching the sea, form the estuary of the Gironde. It is a few miles above the head of this estuary, and on the left bank of the Garonne, that *Bordeaux*, the famous capital of Aquitaine, is situated. It was at Bordeaux that the Black Prince—created Prince of Aquitaine by his father, Edward III.,—held for many years his court, and it was there that his son, afterwards Richard II. of England, was born. The importance of Bordeaux bears reference to nearly every period of French history, modern as well as medieval. In the present day, with a population which exceeds 150,000, Bordeaux ranks fourth among the great cities of France, and commands an important share of the foreign trade of that country — especially of the export trade in wines, for which its position renders it the natural outlet.

The Bordelais (as the tract of country lying round Bordeaux is

called), falls within the western portion of Guienne. In the middle and eastward divisions of that province are *Perigueux*, *Agen*, *Cahors*, *Rodez*, and numerous other places of provincial note, many of them of Roman origin.

Gascony is to the south and south-west of Guienne. It includes the valley of the river Adour, which, deriving its waters from the Pyrenees, makes a considerable circuit before its termination in the Bay of Biscay. None of the cities of Gascony are of any considerable note. *Tarbes*, *Auch*, and *Mont de Marsan*, are amongst their number. Auch, the former capital of the Ausci, a Gallic nation, stands on the river Gers, which joins the Garonne. Tarbes, on the Adour, the former capital of the Counts of Bigorre, is also ancient; the Black Prince at one time held his court there. *Bayonne*, in Lower Gascony, stands a few miles above the mouth of the Adour, at the point where it is joined by the little stream of the Nive.

Angoumois and Saintonge, to the northward of Guienne, are watered by the Charente — a river which gives its name to two of the departments of modern France, and which, after a course of 200 miles, enters the Bay of Biscay. Aunis, a maritime province, of small extent, immediately adjoins the lower Charente, chiefly to the northward of that river, and is fronted by the isles of Ré and Oléron.

Angoulême, the capital of Angoumois, and the former residence of the counts who bore that title, stands on the upper Charente. In modern French geography, it has about 20,000 inhabitants, and is distinguished for its numerous paper mills. *Cognac*, the centre of the brandy trade, is within the same province, to the westward of Angoulême, and also on the Charente river.

Saintes, the capital of Saintonge — standing above the left bank of the lower Charente — is distinguished by its numerous Roman remains, as well as by many monuments of the mediæval period. Its cathedral dates its foundation from the time of Charlemagne, though the original edifice has long ceased to exist.

The province of Aunis includes the ports of *Rochefort* and *La Rochelle* — the former on the little estuary which the Charente forms at its mouth, the latter further to the northward. Both are of ancient origin. The historic greatness of La Rochelle belongs to a later period than that to which we are now referring.

The provinces described above, under the general designation of Aquitaine, are distinguished by a sunnier sky, and a warmer atmosphere, than belong to the north, or even middle of France. This is especially the case with the seaward division of Guienne, and the adjoining provinces

of Saintonge and Angoumois — that is, the valleys of the Charente and the lower Garonne. This is the region of the vine culture. The extensive orchards, their trees laden with numerous varieties of the plum and other fruits, and the abundant crops of corn, attest the rich soil and favourable climate of the ancient principality so long attached to the Crown of England.

Aquitaine had been added to the possessions of the English crown by Henry II., and it remained under English dominion long after the other continental possessions of the kings of England had been lost. When Edward III. mounted the throne, Aquitaine alone remained of the French provinces formerly ruled by the Plantagenet kings, and some portion, at least, of the extensive territory which had borne that name remained English down to the middle of the 15th century. The larger part of what had constituted the Black Prince's dominions had, indeed, been regained by France even before the reign of Edward III. came to its close, but portions of Guienne and Gascony continued attached to English rule down to the time when, under our English king Henry VI., the conquests of his father on the soil of France were finally lost. Bordeaux and Bayonne were the last to submit, in 1452, to the arms of the French king, Charles VII.*

7. BRITTANY (or BRETAGNE), a peninsular region, forms the north-west corner of France. It stretches out into the Atlantic far beyond the general line of the French coast, and divides the waters of the Channel and the Bay of Biscay.

The south-western peninsula of England repeats on a smaller scale all the natural features that belong to the Breton peninsula. There are in the larger region on the south side of the Channel the same description of high, rugged, and sea-worn coast, the same wide-spreading plains

* The people of the Bordelais long remained attached to the memory of their English rulers, and, under the oppressive fiscal exactions of their new sovereign, continued to regret the loss of the commercial and other advantages which they had enjoyed during the period of English dominion over their sunny land. See Hallam: Middle Ages.

of naked rock, with gigantic granite *tors* rising above them, that belong to the counties of Devon and Cornwall. Even the names of particular localities are repeated. There is a district of Cornouaille (Cornwall) in Brittany, and the famous Mont St. Michel, within the bay formed by the angle which the shores of Normandy and Brittany make at their junction, is a counterpart to the well-known St. Michael's Mount, on the coast of Cornwall. Bretagne, again, the name of the one region, repeats that of Britannia, of which the other forms a part. A Celtic population occupies both. The native language of the Breton peasant, even in the present day, is almost identical with the Welsh tongue, to which the now extinct language of Cornwall was closely analogous. The same monuments of Druidical superstition — cairns, cromlechs, and huge rocking-stones — occur in the one region as in the other. The popular superstitions and traditions are the same in Brittany as in Celtic Britain; and the mythical greatness of Arthur, the hero-king, is a cherished object of regard to the Breton as well as to the Welsh and the Cornish peasant.

The coast of Brittany extends on the side of the Bay of Biscay to the southward of the Loire, the outlet of which river falls within its limits. The high grounds which occupy the greater part of the interior reach in many places to the sea-coast, which exhibits much diversity of outline, forming numerous safe and sheltered harbours. The greatest elevations of the land, however, hardly exceed twelve hundred feet. Next to the lower portion of the Loire, the Vilaine (with its affluent, the Ile), and the Aulne, are the chief rivers of Brittany. The Aulne has its outlet in the extensive bay which forms the harbour of Brest.

The city of *Rennes*, with 40,000 inhabitants, situated at the point where the Ile and Vilaine unite their waters, ranks as the capital of Brittany. Rennes, however, is greatly inferior in size and population to *Nantes*, which stands on the north bank of the Loire, 30 miles above the sea. Nantes is the chief city of Lower Brittany, and was in former times regarded as one of the most important possessions

of the ducal rulers of the province. Its population exceeds 108,000.

Among the numerous seaport towns of Brittany, the most celebrated are *St. Malo*, *St. Brieux*, *Brest*, *Quimper*, *L'Orient*, and *Vannes*. The two first-named are on the shores of the Channel: the harbour of Brest fronts the Atlantic: the others belong to the coast of the Bay of Biscay. *Hennebonne*, the defence of which during its siege by a French army in 1342 forms a stirring picture in the chronicles of Froissart, is a small town situated on the river Blavet, a few miles NE. of L'Orient.

The nominal homage which, in the 9th century, the independent dukes of Brittany owed to the kings of France, was early transferred to the dukes of Normandy.* A direct connection between this province and the crown of England resulted from the policy of the first Plantagenet king, Henry II., who united his son Geoffrey in marriage with the daughter and heiress of the reigning Duke of Brittany. Favoured by the internal disorganisation of the duchy, Henry for a time extended his power over the greater part of its limits, keeping his court, in the winter of 1166, in the castled rock of Mont St. Michel. Brittany, however, became freed from English control under the reign of Henry's unworthy son John.

French Possessions of Edward III.— When Edward III. ascended the throne of England (1327) the English possessions on the continent were limited to Aquitaine. France, though wanting the unity of resources which was effected by her rulers a century and a half later, was already a great and powerful kingdom. In England the distinction between Norman and Saxon had disappeared, and the vigorous administration of the first Edward had tended greatly to enhance the resources and raise the spirit of the nation. Edward III. laid claim, in right of his mother, to the throne of France — an unjust and even absurd pretence. But his pretensions, though ultimately attended by the failure which they merited, and for a time accompanied by ill success in arms,

* Hallam: Middle Ages.

are connected with some events that are truly glorious to the English nation. The names of Crecy and Poitiers belong to the most stirring records of this period.

In 1346 Edward invaded France with a large army, landing on the French coast at the port of La Hogue, near Barfleur, in Normandy. He ravaged the valley of the Seine nearly up to the gates of Paris, but in danger of being encompassed by a superior force, felt it necessary to retreat towards Flanders, with the Count of which he was in alliance. Edward's line of march was through the plains of Picardy, across which the river Somme flows, on its course to the Channel. This stream lay in the English king's way, and it was necessary to cross it. The French army — immensely outnumbering his own — hung on his rear. After vainly endeavouring to cross at several places in succession, Edward was informed by a peasant that the Somme was fordable, when the tide was out, at a spot called Blanche Taque, about seven miles below Abbeville, and nearly midway between that town and the mouth of the stream. The English crossed the river at this point, defeating a detachment of the French army posted upon the north bank to dispute the passage, and then encamped in the fields between Crotoy and Crecy. The former of those places lies on the north bank of the Somme, a short way above its mouth. Crecy is a village lying about ten miles distant from that river, in the direction of N. by E. from Abbeville. Edward posted his forces on an eminence behind this village, and determined to await there the attack of the French.*

The battle of *Poitiers* was fought on September 19, 1356, ten years later in date than the battle of Crecy. The immediate occasion of this famous conflict — more important in its consequences than the prior engagement — was the

* The battle of Crecy was fought on Saturday, August 26, 1346. Five days after the battle of Crecy, Edward laid siege to Calais. The siege lasted eleven months. Crecy falls within the department of Somme, in modern French geography: Calais in that of Pas de Calais. Both places were within the ancient Picardy.

invasion of the French king's dominions, from the side of Guienne, by an army under the Black Prince. The numerical disparity between the opposite forces was nearly as great as at Crecy, the French outnumbering the English forces in the ratio of six to one.* The Black Prince's victory was complete. The French king (John the son of Philip Valois) was taken prisoner, and remained a captive in the hands of the English until the treaty of Bretigny, in 1360.

BRETIGNY, which gave its name to the famous treaty of 1360, is a village of Orleanais (within the modern department of Eure et Loire), situated five miles SE. of the town of Chartres. By the treaty concluded at this place, Edward renounced all title to the throne of France, and received in recompence for the concession the full sovereignty of the provinces of Guienne, Gascony, Poitou, Saintonge, the Limousin, and Angoumois, together with Calais, and the county of Ponthieu. The two last mentioned localities — Calais and Ponthieu — comprehend nearly all that the English king had really gained by fourteen years of war, for the other provinces had all (excepting Poitou) been included within Aquitaine, which was already English at the commencement of Edward's career of invasion.†

PONTHIEU, a maritime district, forms part of Picardy. It extends across the lower Somme, reaching northward from that stream to the little river Ternoise. The village of Crecy falls within its limits, as also does the city of Abbeville.‡

FRENCH CONQUESTS OF HENRY V. — Two generations later, an English king again invaded France. Henry V., within little more than twelve months after his accession to

* A large proportion of the Black Prince's army was composed of Gascons.

† Even before Edward's death, nearly all his conquests, excepting Calais, had been already lost, and of the immense principality which he had conferred upon his son scarcely anything but the cities of Bordeaux and Bayonne remained.

‡ Ponthieu had formed the marriage portion of Edward's mother, Isabella, the daughter of Philip the Fair, married to Edward II.

the throne, renewed the ill-grounded pretence which had been made by Edward III. to the crown of that country, then torn by contending factions, and weakened by civil strife.

In August 1415, Henry set sail from Southampton, and landing at the mouth of the Seine, laid siege to Harfleur, then a strong fortress: Harfleur surrendered after a siege of thirty-six days, during which the army of the English king had suffered greatly from sickness. Notwithstanding the weakened state of his forces, Henry determined on marching direct to Calais, though the doing so involved the passage through the hostile provinces of Normandy, Picardy, and Artois, in full possession of the enemy's troops. The English army, on leaving Harfleur, could not have numbered above 9000 men. No important obstacle occurred on the march until the limits of Normandy were passed, but when within Picardy the difficulty which had presented itself to the army of Edward III. recurred to that of Henry V. It was necessary to pass the Somme. The ford near the mouth of that river, by which Edward had crossed, was found unavailable: it was defended by strong palisades, with fortified works upon either bank. The English were therefore compelled to march inland, up the valley of the Somme, in search of a passage. This was not found until a ford was reached near the village of Betencourt, more than 40 miles above Amiens, and about 15 miles below the town of St. Quentin. From the north side of the Somme, Henry pursued his march direct towards Calais, the French army falling back as he advanced, until it made a stand near the neighbouring villages of Ruisseauville and Azincourt, ten miles to the north-westward of the town of St. Pol, and within the plains of Artois. Henry's army had but just forded the deep and rapid stream of the Ternoise (a tributary of the Canche, which enters the Channel below Montreuil), when it came in sight of the French columns, posted immediately behind the castle of Azincourt. There, upon the following day (Oct. 25, 1415), the battle which bears that name was fought.

The loss of the French at Azincourt * was frightfully severe. It needed, however, the campaigns of three successive after years before the realm of France lay at the disposal of the victorious king of England. The army with which Henry landed on the coast of Normandy in 1417, was larger than any that had before left England; but the English had to fight their way, step by step, through Normandy, the population of which was thoroughly hostile to the invaders, so completely had the lapse of time altered the mutual relations of Normandy and England to one another.† Caen, Bayeux, Lisieux, Falaise, Louviers, and Rouen, were successively reduced — the last only when the garrison, after a blockade of nearly half a year's duration, were at the extremity of famine. After the fall of Rouen the English king advanced to Mantes on the Seine, 60 miles below Paris, and thence to Meulan, some miles nearer the French capital. The negotiations commenced at Meulan were broken off for a time, but France was now prostrate before the English conqueror. In the spring of 1420, Henry marched with the finest portion of his army to *Troyes*, the old capital of Champagne, and there met the French king. By the treaty concluded at Troyes, Henry was declared heir to the French monarchy on the death of the reigning king of France, Charles VI., whose daughter Catherine became the bride of the English king. During the fifteen years which followed (1421–1436), Paris was in the possession of the English, and the birth of an infant prince, afterwards Henry VI., was celebrated with equal joy in the capitals of France and England.

* At the battle of Azincourt the French army outnumbered the English in the ratio of above six to one — a disproportion nearly as great as that exhibited by the two armies which had fought at Crecy, sixty-nine years before. A space of less than twenty miles separates the ground upon which the two memorable engagements were fought. Azincourt is within the department of Pas de Calais.

† In vain did Henry remind the Norman people of his descent from their great chieftain, Rollo, and strive to awaken sympathies founded on a relationship between themselves and their ancestors, the Norman conquerors of England. Three centuries and a half had elapsed since the date of the conquest of England by a Norman duke. The descendants of the Norman followers of William had long ere this become Englishmen, and the Normans of the continent were in nearly an equal degree incorporated with the French nation.

The treaty of Troyes provided for the union of the crowns of France and England on one head—a consummation which, happily for both nations, was never accomplished. Henry V. died in 1422 at Vincennes, in the neighbourhood of Paris, the inheritance of his possessions and claims devolving on his infant son, Henry VI., who was proclaimed King of France as well as England, under the care of his uncle, the regent Bedford. Charles VI., the imbecile French king, only survived Henry by two months, and the dauphin, who succeeded him, was crowned at Poitiers as Charles VII.

The victories of Henry V. had given the English possession of a larger area of France than had belonged to them at any former period—larger even than under Henry II. At the commencement of the reign of Henry VI. the very existence of France, as an independent nation, was almost destroyed: what little remained of French power was driven to the south of the Loire, and the city of Orleans, on the banks of that river, became the chief stronghold of the French monarchy. France was saved from utter ruin by the heroism of the Maid of Orleans, Joan of Arc.

The English laid siege to Orleans in 1428. This siege was the turning point in the fortunes of France. The siege was raised after seven months continuance (May 1429) and the French king was crowned at Rheims two months later. From this time (and with some ebb and flow of success and failure) the English cause in France continued to decline, and the French cause to advance. The unexpected capture of the French heroine, the maid Joan, at Compiegne (a small town on the Oise, 42 miles NE. of Paris) in the summer of 1430, and her cruel execution at Rouen in the following year, did not retard the general course of events. The English garrison in Paris capitulated to the Burgundian chief in 1436. One province after another was subsequently lost. In Normandy the English maintained a lengthened struggle for the permanence of their dominion. It was not until 1450 that, with the capture of Cherbourg, where the English

sustained their last siege, that province was finally lost. In the south of France, the contest was prolonged to two years later date. Fronsac,* Bordeaux, and Bayonne, remained in the keeping of the English garrisons, when all Guienne had declared in favour of the French king; but, helpless of succour, they at length capitulated, and Aquitaine, the brilliant dowry of Henry II.'s queen, was for ever disunited from the crown of England.

All that now remained to England, upon the soil of France, consisted of Calais and the adjoining strip of marshy land commanded by its batteries. Calais was dear to the English nation, not less from the memories with which it was associated, than from the political advantages believed to attach to its possession. It remained in the hands of the English until 1558, when, during the reign of Queen Mary, it yielded to a sudden attack on the part of the Duke of Guise, of only eight days' duration. It had then been upwards of two centuries in English possession.

Calais has in the present day a population of 13,000. It is still a fortified town, walled, and protected by a strong citadel on its western side, besides having several detached forts which command the harbour and the approaches of the town. The importance long enjoyed almost exclusively by Calais as a place of transit between England and the continent no longer attaches to it: even in so far as France alone is concerned, it is in great measure superseded by Boulogne in this respect. Calais, however, is connected by railway with Lille, and, through that city, with Paris, Brussels, and the other principal cities of continental Europe. The little town of *Guines*, 6 miles S. of Calais, and included with it in the tract so long subject to English dominion (the former county of Guines), lies in a marshy plain, through which runs a canal which connects it with Calais. Guines has about 4,000 inhabitants.

* At the junction of the Dordogne and l'Isle rivers, and on the N. bank of the former, opposite Libourne, 16 miles NE. of Bordeaux.

CHAPTER VIII.

WALES.

CONQUEST OF WALES.— It was not until near the closing years of the thirteenth century that England and Wales became united into a single kingdom — a result due to the determined and persevering efforts of Edward I. in the subjugation of the Welsh people. We have already sketched the physical aspect of Wales.* The rugged surface of that mountain land enabled its inhabitants to preserve a virtual independence throughout the period of Saxon rule, and through more than two centuries of Norman dominion over the rest of South Britain.

Roman discipline had overcome the rude valour of the Celtic population of the Welsh mountains, and the Romans held their land in military occupation, as they did all the rest of the island. Several of the military stations of the Romans are within Wales,† and the remains of the Roman roads by which the country was traversed are still visible. But the Saxon kings of Mercia, whose dominions bordered on the lands occupied by the Welsh, did not penetrate the mountain region, unless for a temporary purpose, in retaliation for the forays to which they were at all times liable on the part of its inhabitants. Offa, the powerful King of Mercia, who reigned between the years 755 and 794, compelled the Welsh kings of Powys to retreat beyond the Wye, and planted Saxon colonies in the tract of country lying west of the Severn — between that river and the borders of the mountain region. To secure the country

* See chap ii. p. 24. † *Ante*, p. 90, 91.

thus colonised, and protect his subjects from the inroads of the mountaineers, he constructed a ditch and rampart — known as Offa's Dyke — along the whole length of the Welsh border, from the mouth of the Dee to the outlet of the Severn. Portions of this work still remain, and nearly the whole line may be traced without difficulty.* The Welsh, however, frequently broke through this rampart.

During the chief part of the Saxon period, the great divisions of Wales were Gwynedd, Powys, Dyfed, and Deheubarth, each of which formed, at least at times, a distinct kingdom, and the last-named of which included several smaller states. GWYNEDD embraced the northern and north-western part of Wales, and had Aberffraw (now a mere village), on the SW. coast of Anglesey, for its capital. POWYS was the more eastwardly portion of what is now understood as North Wales. Before the date of Offa's conquests, the kings of Powys had extended their dominions eastward to the Severn, and held their court in the city of Pengwern, or Shrewsbury. The kingdom of DYFED, or Dimetia (known also as West Wales), included the tract of country between the Towy and the Teify rivers, and had Dynevor, in the valley of the former, for its capital. DEHEUBARTH, which comprehended the rest of South Wales, included several small states, amongst which were GWENT (the present Monmouth), the capital of which was Caerleon, and MORGANWG, or Glamorgan: also GWYR, or Gower.†

Offa's Dyke constituted a boundary that was little more than nominal. The real limit between the Welsh

* Offa's dyke extended "from one sea to the other, from the south near Bristol to the north above Flint, between the monastery of Basingwerk and Coleshill" (Welsh Chronicle). The ruins of Basingwerth Abbey are situated a short distance from the town of Holywell, to the north-eastward near the shore of the Dee estuary. Coleshill appears on the modern maps in the form of Counsillt (near the town of Flint), and gives its name to one of the hundreds into which the county of Flint is divided. The ancient forest of Coleshill stretched from the neighbourhood of the coast a considerable distance inland, towards the hilly country which borders the valley of the Clwyd upon the east.

† Lappenberg: Hist. of England under the Anglo-Saxon Kings, translated by B. Thorpe (London, 1845).

and the Saxon territory fluctuated with the ability of the Saxons to resist Welsh inroads, and to enforce the submission of the mountaineers. Hardly was Offa's Dyke finished, before the Welsh broke through the rampart. A terrible retaliation ensued: the Mercian king engaged the mountaineers in the marshes between the town of Rhyddlan and the sea (in the north-west corner of Flintshire), and the Welsh were defeated with immense slaughter, their king being slain. This was shortly before the death of Offa, in 795. Under several of the later Saxon kings, an enforced acknowledgment of dependence was extorted from the Welsh, either by policy or arms, or both combined. This was the case, for a time, under Egbert.

The people of North Wales co-operated with the forces of Alfred, in resistance to the Danish marauder, Hasting. Subsequently, we read of an expedition conducted in person by Ethelfleda, the heroic daughter of Alfred, and queen of Mercia, against Brecanmere, or Brecknock, and of submission extorted from the Welsh king on the part of her brother Edward. Again, Athelstane, the grandson of Alfred, extorted tribute from the Welsh princes, as also did Edgar, who reigned A.D. 958–975. Edgar reckoned three Welsh kings amongst the eight monarchs who rowed his barge upon the river Dee, while his own hands guided the helm.*

During the reign of Edward the Confessor, severe chastisement was inflicted on the people of North Wales by Harold, the son of Earl Godwin (afterwards king of England). Harold surprised the Welsh king, Gryffyth, in his castle of Rhyddlan, in Flintshire, and pursued the defeated monarch to his retreat among the rugged heights of Penmaenmawr. Pressed by famine, the followers of Gryffyth

* The same monarch, we are told, commuted the tribute which the Welsh engaged to pay him into 300 wolves' heads annually, "and (says William of Malmesbury) this tribute ceased in the fourth year, for want of wolves to kill." These ferocious animals, however, were found in South Britain down to the times of Edward I., and were not finally extirpated from Scotland until four centuries later, the last of them having been killed by Cameron of Lochiel, in 1680.

broke out in rebellion against their sovereign, whose head they sent to the Saxon earl in token of submission (A.D. 1063). By a law then passed it was ordained that every Welshman found in arms to the east of Offa's Dyke should lose his right hand.

The early Norman kings, on several occasions, took severe measures to check the incursions of the Welsh mountaineers into the adjacent plains, and confine them within their own proper frontier. The Conqueror led an army into Wales in person, as also did his immediate successor, William Rufus. The Red king, however, lost many of his troops among the defiles of Snowdon, and accomplished little beyond the greater security afforded by the chain of fortresses which he caused to be erected along the frontier. The open and more level country of South Wales, along the shore of the Bristol Channel, afforded greater facility for conquest than the middle and northerly parts of the mountain-region. Henry I. settled as colonists in this tract a number of Flemings who were exiled from their native land in consequence of the troubles which prevailed there, and who brought with them their habits of industry and their skill in the weaving of woollen cloths. These Flemings, settled in Pembrokeshire, maintained their position in spite of the hostility of their Welsh neighbours. The entire line of coast lying along the north side of the Bristol Channel, indeed, appears to have been in possession of the early Norman kings of England. It was in Cardiff Castle that the unfortunate Duke Robert, brother of Henry I., lingered so many years in sightless captivity. Milford Haven was the port whence, in the time of Henry II., Strongbow embarked on his expedition to Ireland. Henry II. on two occasions conducted expeditions in person against the undaunted mountaineers, and with but small success in either instance. On the former of these occasions (in 1157) the English king, crossing Flintshire, and advancing into the mountain-region on its south-western border, sustained severe loss within the tract then known as Coleshill Forest.

In the later instance (1165) Henry, penetrating the lands of Powys, fought a general action with the Welsh on the banks of the river Ceiriog (an affluent of the Dee), advanced to the foot of the high range of the Berwyn mountains, where he encamped in the neighbourhood of the town of Corwen, on the Dee. Here his army suffered severe loss from the attacks of the mountaineers, aided by sudden swelling of the streams, from torrents of rain, and he was obliged to retreat in some disorder. Five and forty years later, John made a display of military prowess by leading an army to the foot of Snowdon, and succeeded in obtaining some tribute from the Welsh, as well as a further acknowledgment of dependence on the English crown.

The line of the Welsh marches, or border, was always insecure, and the retainers of the Norman barons were scarcely safe beyond the shelter of their castle walls. The mountain-population cherished a deeply-rooted hostility towards the dwellers in the adjacent plain, from whom they differed in race, language, and pursuits. The Norman frontier, however, gradually (though slowly) advanced, the Welsh were with each generation more closely hemmed in. The final subjection of the mountain-land was accomplished by Edward I., between the years 1277 and 1284. A large portion of South Wales was at that time already in the power of the English nobles, whose frontier castles formed a chain between the Severn, the Munnow, and the Wye, and who maintained unbroken communication, along the coast-line, with Milford Haven, then become the principal port of communication with the subjugated kingdom of Ireland. But in North Wales, the mountaineers, under their hereditary prince, Llewellyn, were still virtually independent. The mountain-wilderness of the north-west—by "dreary Arvon's shore," — which culminates in the rocks of Snowdon, formed the last stronghold of Welsh nationality.

The complete subjugation of the Welsh people by force of arms was not an easy task. In 1277 the English king,

marching from Chester, and keeping along the coast, took the castles of Flint and Rhyddlan, which he strengthened and garrisoned. A fleet (furnished by the Cinque Ports) co-operated with his army, and cut off the supply of provisions from the Welsh, who with Edward's further advance became cooped up within the mountains, every outlet from which was guarded. With the setting in of winter, famine compelled the Welsh prince to surrender; and, at Rhyddlan castle, Edward dictated a treaty by the terms of which the country as far as the river Conway was ceded to the English, with reversion of the Isle of Anglesey on the death of the Welsh prince without male heirs, while an enormous pecuniary fine was imposed. This treaty was evidently regarded by the Welsh as nothing more than a truce extorted by necessity. The cessation of hostilities between the mountain-population and their foes was only of brief duration. In the spring of 1282 the Welsh, sallying from their mountains, took the strong castle of Hawarden, and laid siege to the castles of Flint and Rhyddlan. The English king resolved on speedy retaliation, and was probably glad of the pretext thus afforded for completing his conquest. With a numerous army — again aided by a fleet — Edward penetrated the fastnesses of Snowdon. The victory which he finally achieved was by no means easy: on more than one occasion the fierce onslaught of the Welsh compelled the retreat of the English army — even its temporary discomfiture. Edward employed the services, as auxiliary troops, of Basque mountaineers from the Pyrenees, who were accustomed to the difficulties of mountain warfare, and the unhappy Welsh were hunted down even in their mountain fastnesses. At Builth, in the valley of the Wye, while on his march southward, to meet a force which the English king had ordered to advance from the direction of Caermarthen and Pembroke, Llewellyn was surprised and slain, perhaps with some admixture of treacherous contrivance. His brother David protracted through a further six months the struggle for Welsh independence, but was

at length betrayed into the hands of the English king. A parliament assembled by Edward at Shrewsbury (1283) pronounced the doom of the last of the native Welsh princes, and of the Welsh as an independent nation.

After the death of Llewellyn, Edward spent upwards of a year in Wales. During this time, he held a council or parliament in the castle of Rhyddlan, in Flintshire (1283), where various provisions for the regulation of his new conquests, the division of Wales into counties and hundreds after the manner of England, and other matters affecting the Welsh people, were made. The birth of an infant son, in the castle of Caernarvon, gave the well-known occasion for his gratification of the Welsh nation by the title of Prince of Wales, conferred upon one who was really a native of the principality. The eldest son of the English king, Alphonso, was then living, and the Welsh looked forward to the rule of the newly-created prince over a separate territory. But Prince Alphonso died: the Prince of Wales became heir to the crown of England, and the title, borne ever since by the eldest son of an English sovereign, is all that remains in recognition of the existence of the Welsh as a nation.

The division of Wales, however, made by Edward I. for the purpose of assimilating it to his English dominions, was only partial. Eight only of the present Welsh counties were recognised on this occasion. It was not until the reign of Henry VIII. that all previously remaining distinctions were abolished, and the whole of Wales declared to be finally and completely incorporated with the realm of England. By the statute of 27 Henry VIII. (1535), all the marches or border-lands between the two countries were either formed into new shires, or added to shires that had already been constituted by Edward I. The new counties thus created were Brecon, Radnor, Montgomery, Denbigh, and Monmouth — the last named being now for the first time designated an English county. The English counties of Salop, Hereford, and Gloucester,

were augmented by the annexation of certain lands lying on the Welsh border. Several changes were also made in the extent and boundaries of the counties previously formed by Edward I. Thus, one of the cantrefs or divisions of Merioneth was added by the statute of Henry VIII. to the newly-formed county of Montgomery. The western portion of Glamorganshire, including the peninsula of Gower, which had previously belonged to Caermarthen, was now first included within the limits of the former county; while the newly-erected county of Monmouth was made to include the tract lying between the river Usk and Rumney, which had hitherto formed part of the lands of Morganwg, or Glamorgan.

Prior to the English conquest, the division of the various districts of Wales was into *cantrefs*, which were further divided into *cwmwds* (or comots). These divisions were by the statute of Henry VIII. rendered equivalent to the correspondent hundreds of the English counties, and are now commonly spoken of as hundreds. The only one of the Welsh counties which retains its native designation unaltered is Merioneth, or Merionydd. Some of the others have derived their names from the Norman barons to whom various portions of the border-lands were granted, or the custody of the Welsh marches assigned, by the early Norman kings of England. This is the case with Montgomery and Pembroke. Others exhibit an altered form of the appellation derived from native princes or chieftains of Wales, as Glamorgan, from Morganwg, or Gwlag Morgan (the country of Morgan); and Cardigan, from Caredigion, the territory of Caredig, the first king of that district. The adjoining district of Caermarthen, with nearly all South Wales, was at one time included within the kingdom of Caredigan. Caernarvon (Caer-yn-Arvon, i.e. the fortress in Arvon) preserves the native designation of Arvon, applied to the north-western division of the principality.

CHAPTER IX.

EARLY BATTLE-FIELDS OF ENGLAND—THE WARS OF THE ROSES.

THE following localities, referred to within the earlier chapters of English history following the Norman conquest, are rendered noteworthy by the sanguinary contests of which they were the scene:—

	A.D.		A.D.
North Allerton (Battle of the Standard)	1138	Neville's Cross	1346
Lewes	1264	Otterbourne (Chevy Chase)	1388
Evesham	1265	Homeldon	1402
Halidon Hill	1333	Shrewsbury	1403

NORTH ALLERTON, YORKSHIRE. — The town of North Allerton lies in the midst of the great plain of York, a short distance east of the river Wiske, an affluent of the Swale, and within the North Riding. It is 31 miles distant from the city of York, in the direction of N.N.W., on the great line of road northward towards Durham and the Scotch border, and also on the line of the Great North of England Railway. Cowton Moor, where the engagement known as the Battle of the Standard was fought, is between five and six miles distant from North Allerton, to the north-westward.

The Battle of the Standard occurred during the troubled reign of Stephen, the records of which unhappy period are chiefly occupied with the contest for supremacy between that prince and the empress Matilda. The numerous petty sieges and skirmishes which occurred in its course were preceded by the more noteworthy event here referred to, in which the English barons of the north, with their retainers, on the one hand, and the army of the Scots, under their

king, David, on the other, were the contending parties in the field. The Scots, their army consisting of forces drawn from every quarter of North Britain — the Lowlands, the Highland region, and the islands of the western coast — had advanced into England in support of the cause of Matilda. King Stephen, engaged in the south, was unable to reach the scene of contest, but the northern barons, instigated by the aged (but still energetic) archbishop of York, Thurstan, gathered their forces in opposition to the invaders. The armies met at Cowton Moor.*

LEWES, SUSSEX.—The town of Lewes, in the eastern division of Sussex, lies on the right bank of the little river Ouse, which enters the Channel about seven miles below. The ground upon which it is built forms part of the lower slopes of the chalk range of the South Downs, which are here intersected by the valley of the Ouse. Higher eminences of the same range overlook the town to the east and west, nearly enclosing it on all sides, excepting towards the south. The battle to which Lewes gives its name appears to have been fought to the westward, or south-westward, of the town, near the ruins of its ancient Priory. Leicester, marching from London, encamped on the Downs two miles distant, and descended thence to the attack of the royal army posted in the hollow below.

The battle of Lewes belongs to the lengthened reign of Henry III. It was fought on May 14, 1264, between the forces of the King on one side, and those of the confederate barons, under the powerful Earl of Leicester (Simon de Montfort) on the other. The ex-

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* The site of the engagement is still called Standard Hill, and the holes into which the bodies of the dead were thrown are pointed out as the Scots Pits. The battle derived its distinguishing appellation from the fact of a remarkable standard, which formed the rallying point of the English army. This consisted of a cross which occupied the summit of a tall mast, and below which were the banners of three principal English saints, the whole drawn upon a car with four wheels. This standard occupied the centre of the English position, and around it, beside the Norman barons and their followers, many of the English yeomanry and peasants, from the plains, wolds, and woodlands of Yorkshire, Nottingham, and Lincolnshire, were gathered—armed with the national weapon of England in former time, the bow. An animated description of the contest, derived chiefly from Matthew Paris, is given in the Pictorial History of England, book III. chap. i.—Also Hume, chap. vii.

perienced skill and valour of Leicester ensured a victory to his side, and both the King and his brother, together with Prince Edward (afterwards Edward I.) remained prisoners in his hand at the conclusion of the engagement.*

EVESHAM, WORCESTERSHIRE. — The neighbourhood of Evesham witnessed, in the following year, a reversal of the success which had attended the Earl of Leicester at Lewes.

Evesham, a town of ancient date, and of some importance prior to the Norman conquest, is situated on the right bank of the upper Avon, within the fertile and beautiful valley to which its name is given. It lies within the south-east portion of the county, 13 miles E.S.E. of the city of Worcester, and near the Gloucestershire border. The town is nearly encircled by the winding course of the Avon, which there makes a deep bend to the southward. The battle was fought on the high plain to the north of the town, and above a mile distant from it: the ground is there considerably elevated above the river.

The circumstances connected with the battle of Evesham can only be understood by reference to the map of that portion of England. Prince Edward, retained as prisoner after the battle of Lewes, had escaped from the close surveillance maintained over his person at Hereford, whither, along with his father, he had been carried by Leicester. The earl himself, with the main body of his forces, was stationed at Hereford. His son, Simon de Montfort, with the rest of the insurgent forces, was in Sussex, whence he set out with the intention of joining his followers to those of his father, marching, for the purpose, through Oxford, and thence towards Kenilworth, in Warwickshire. It was the aim of the prince to prevent the junction of these two bodies of his foes, and with that view he sought to confine Leicester's forces to the right (i.e. the west) bank of the Severn. He succeeded, by a night march, in striking a blow at the army of Simon de Montfort, whom he surprised, with his attendant knights, while bathing at sunrise in the waters of the Avon, not far from Kenilworth (in Warwickshire). The earl, meanwhile, in spite of the prince's efforts, had crossed the Severn, and, deceived by a

* See Pictorial History of England, book IV. chap. i; also Hume, chap. xii.

feigned march of the prince in an opposite direction, had moved forward in the direction of Kenilworth. The prince, however, his purpose accomplished, turned again on his former track, and, getting in advance of Leicester, reached Evesham before his foe, in time to secure an advantageous position for his army, and to make himself master of the surrounding roads. When the earl approached Evesham, he found that he was hemmed in upon every side. He was compelled to fight, and the battle that ensued was decisive.*

Two years of desultory resistance to the royal authority succeeded the battle of Evesham. The most noteworthy incident of that term of contest was the defeat by the prince of Adam Gourdon, one of the malcontent barons, in a skirmish fought near Alton, in Hampshire. When, shortly after its close, the kingdom was restored to general tranquillity, Prince Edward assumed the cross, and departed for the Holy Land — the last English prince who engaged in the enterprise of recovering Jerusalem out of the hands of the Saracens.

HALIDON HILL. — The battle of Halidon Hill, though its site falls within what is now the English border, was fought upon Scotch rather than English ground. Halidon (or Halidown) is a tract of rising ground which nearly adjoins the town of Berwick-upon-Tweed — about a mile to the north-westward. The highest point of the hill reaches about 540 feet above the sea. The low tract of meadow between the high ground and the sea is now known as Magdalen Fields.

At the date of the battle of Halidon, 1333, the town of Berwick, the possession of which had already fluctuated between the Scotch and English nations, was in the hands of the former. It was invested by a powerful English army in May of that year (six years after the date of Edward III.'s accession), with the purpose of giving support to the claims of Edward Baliol to the throne of Scotland. The governor of the beleaguered town had promised to surrender it unless relieved by the ensuing 20th of July. Upon the 19th of that month, the army of the Scots, under Lord Archibald Douglas — then acting as regent on behalf of the young king, David Bruce (son and successor of the great Robert Bruce) — came in sight of

* A tower erected on the field of battle, immediately beside the high road leading from Evesham northward, along the right bank of the Avon, is said to mark the spot where the Earl of Leicester fell. The name of Battle-well in the same vicinity, somewhat nearer the town, also commemorates the event.

Berwick, and found the main body of the English army drawn up on the rising ground of Halidon. This elevation was then partly surrounded by bogs and marshes, but the Scots, in spite of the natural advantages of position which favoured their foes, resolved to attack them, and sustained as the result a severe defeat. The town of Berwick surrendered to the English the day after the battle.*

NEVILLE'S CROSS, DURHAM.—Neville's Cross is in the immediate neighbourhood of the city of Durham, to the south-westward, less than a mile distant from the present suburbs in that direction. Durham itself, with its ancient cathedral and castle, crowning a commanding eminence, and nearly insulated by the Wear,† lies within the fertile plain through which that river flows in its middle and lower course, as it passes on to the German Ocean.

The battle of Neville's Cross (or Durham, as it is called by the Scottish historians) occurred while Edward III. was engaged in the siege of Calais. The better part of the chivalry of England were in attendance on the king. David Bruce, the Scottish monarch, marching from Perth, advanced into Cumberland, and thence into the adjoining county of Durham, encamping about three miles from the city of that name. The English assembled an army at Auckland Park, in the vicinity. The Scots appear to have been ignorant of the English movements, but their king, though taken by surprise, formed his lines, and a decisive battle was fought beside Neville's Cross, on October 17, 1346. Victory was in favour of the English, the Scotch king remaining a prisoner after the action.‡

OTTERBURNE.—The locality of Otterburne is within Northumberland, on the banks of the river Reed (the chief affluent of the North Tyne), and upon one of the main lines of road passing through the border country. The

* The regent Douglas was killed in the fight, together with great numbers of the Scottish lords and chieftains.—See account in Pictorial History of England, book iv. chap. 1; Hume, chap. 15.

† Hence its name; *holm*, a river-island, added to the Celtic *dun*, or hill.

‡ See Pictorial History of England, book iv.; also Hume, chap. xv Froissart, from whom the popular account of the battle is chiefly derived, speaks of Queen Philippa as riding up and down the English lines, and animating the troops. Other cotemporary writers, however, make no mention of the presence of the English queen, which must be regarded as at least doubtful.

little stream (or *burn*) to which the name of Otterburne properly applies joins the Reed on its left bank, about nine miles above the southern extremity of Reedsdale, and seven miles N. by E. of the town of Bellingham.

The Scots, under the Earl of Douglas, upon their return from an invasion of the English border, in the course of which they had penetrated to the gates of Durham, were followed by a body of English under Hotspur. They obtained a hardly-contested victory — purchased with the death of their leader, Douglas — both Hotspur and his brother being taken prisoners.*

HOMELDON, NORTHUMBERLAND.—The battle of Homeldon was fought between a Scotch army, under Douglas, and an English force under the Earl of Northumberland, and his son, Harry Percy, or Hotspur.

Homeldon (or Humbleton) is a rising ground lying about a mile distant, in the direction of north-west, from the little town of Wooler, in the northern part of Northumberland — not far from the foot of the Cheviot Hills. Wooler itself lies about fifteen miles due S. from Berwick-upon-Tweed, on the banks of a little stream or burn, an affluent of the river Till. To the west and southward of the town, in the direction of the Cheviots and the Scotch border, this is chiefly a pastoral tract.†

* An animated description of the engagement—drawn principally from Froissart — is given by Tytler, History of Scotland, vol. ii. chap. 8. The battle was fought by moonlight, on August 5, 1388.

The fight at Otterburne is commonly identified with the battle known in border minstrelsy by the name of Chevy Chase. This latter, however, is by some authorities referred to another locality within the same county — Piperden, or Piperdean — situated within a more northwardly part of the Cheviot region. Piperden is near the left bank of the Beaumont or Glen river, an affluent of the Till — a few miles N.W. of Wooler, and but a short distance from the field of Flodden. In 1434, an English force, under Sir Robert Ogle, was met at Piperden by a body of Scots under the Earl of Angus, and totally routed (see Tytler: Hist. of Scotland, vol. iii.). Numerous localities of border conflict are found within this tract of country. Reedsquair, the scene of the last skirmish of any note between the rival nations (1575), lies at the head of Reedsdale, immediately on the modern border-line between England and Scotland.

† The field of Flodden is only six miles distant from the town of Wooler, to the north-west. Percy's Cross, which marks the site of the battle of Hedgely Moor (1464), is at about an equal distance in the opposite direction. A stone pillar, erected at the base of the hill of Homeldon, commemorates the victory of Earl Percy.

Two years before the date of the battle of Homeldon, the English king, Henry IV., had invaded Scotland, but, after penetrating with his army as far as Edinburgh, had been compelled by scarcity of provisions to retreat within the English border. In the spring of 1402, a Scotch force was defeated at Nesbit Moor (to the north of Wooler) by the Percies, aided by the Earl of March, then on hostile terms with the Scotch king. Earl Douglas, determined to avenge this defeat, had collected an army for the purpose of making an inroad within the English border. "Ten thousand warriors, the best of Scotland, followed the banner of the Douglas, which flew like a meteor from the Lothians to the Tweed, from the Tweed to the Tyne," and devastation followed in the earl's tract, which was extended as far as Newcastle. Thence Douglas turned back, laden with English plunder. But the Percies — the Earl of Northumberland and his son Hotspur — aided by the Earl of March, had meanwhile collected a numerous army in his rear. Douglas, hampered by his spoil, came suddenly upon this force, which was posted near the village of Millfield (a few miles N.W. of Wooler). He availed himself of the high ground of Homeldon as a position for his own army, and there the English advanced to attack him. The fight was won by the English bowmen. Douglas himself severely wounded, was made prisoner, and a complete rout of his followers ensued. Great numbers were drowned in attempting to cross the Tweed. The battle was fought on Holyrood Day, September 14, 1402.*

SHREWSBURY. — The battle of Shrewsbury (July 21, 1403) was fought between the army of King Henry IV. on the one side, and an insurgent force, headed by Hotspur, and various confederates of the Percies, on the other. Shrewsbury, from its position on the Welsh border, formed the head quarters of several of the English kings in military operations undertaken against the neighbouring mountaineers.† Henry IV. had advanced thence into

* This is the battle referred to in the well-known passage:—

——"I remember, when the fight was done,
When I was dry, with rage and extreme toil
Breathless and faint, leaning upon my sword,
Came there a certain lord, neat and trimly dress'd
Fresh as a bridegroom," &c.—*Henry IV. part* 1.

† Shrewsbury appears, either in later British or early Saxon times, to

Wales, to encounter the victorious chieftain, Owen Glendower, who had defeated the forces of the English barons in engagements fought respectively on the banks of the Virnwy and the Teme. The active vigilance of the Welsh chieftain, with the incessant rains of the mountain-land, had combined to frustrate the movements of the English king, and to compel his withdrawal from the principality. It was shortly after these events that the conspiracy of the Percies, which led to the battle of Shrewsbury, was matured. The battle was fought to the eastward of the town, not far from its eastern gate, in the neighbourhood of which the king's army, drawn out from the town of Shrewsbury, was encamped.

Hotspur, at the head of the insurgent forces (amongst whom was the Scottish chieftain, Douglas, taken prisoner at Homeldon the year before, but, with his vassals, fighting at Shrewsbury side by side with his former foes) had marched southward, towards Wales, in expectation of being joined by Glendower, who had entered into the conspiracy, and promised to join his followers to theirs. The king, who had advanced towards the north, turned when he had got as far as Burton-upon-Trent, and directing his course to the westward, reached Shrewsbury in sufficient time to place his army between that of Hotspur and the expected forces of his Welsh ally. The king was scarcely in the town, when he was informed that the insurgent army, with banners displayed, was close at hand. Hotspur halted not far from the royal army, which issued out and encamped beyond the eastern gate of the town. Night was approaching, and the battle was deferred till the morrow. At an early hour on that day, July 21, the armies closed, the contest lasting nearly three hours, and terminating in a complete victory on the side of the royalists. Hotspur, struck by a random arrow, was slain, and Douglas was made prisoner. The young Prince of Wales, Harry of Monmouth (afterwards Henry V.) displayed conspicuously his prowess and military skill, and contributed mainly to a victory which gave assurance to his father's usurped throne.

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have supplanted in importance as a military position the older Roman station of Uriconium (Wroxeter) from which it is only a few miles distant. Under the name of Pengwern, it had been the capital of the Welsh kingdom of Powys.—See *ante*, p. 154.

WARS OF THE ROSES. (1455—1485.)

Some of the saddest chapters of English history are those which narrate the prolonged struggle between the houses of York and Lancaster—or the partisans of the White and the Red Rose. When the contest commenced, Henry VI., the representative of the House of Lancaster, was the reigning king. The opposite party was represented by Richard Duke of York, whose son Edward afterwards became king, under the title of Edward IV.* This fatal quarrel, not terminated until after a lapse of thirty years, was signalised (says Hume) by twelve pitched battles, and is computed to have cost the lives of eighty princes of the blood, while it almost destroyed, for a time, the ancient nobility of England. It carried war and bloodshed into every corner of the kingdom, while the scenes of cruelty and devastation, by which the struggle was almost throughout attended, were productive of effects the most demoralising and injurious to the nation at large.

The battles indicated by the historian — one or two of which, however, are scarcely entitled to the epithet which Hume confers upon them — were (in order of date) the following: —

	A.D.		A.D.
1. St. Albans	1455	7. Towton	1461
2. Blore Heath	1459	8. Hedgeley Moor	1464
3. Northampton	1460	9. Hexham	1464
4. Wakefield	1460	10. Barnet	1471
5. Mortimers Cross	1461	11. Tewkesbury	1471
6. St. Albans (2nd)	1461	12. Bosworth	1485

1. The town of ST. ALBANS, which gave its name to two of the contests enumerated in the above list, is a well-known locality. It lies in the western part of Hertfordshire, on the banks of the little river Ver, an affluent of the Coln, and

* The claim of the House of York (it may be useful to remind the student) was founded on descent by the female side, from the Duke of Clarence, *second* son of Edward III. The House of Lancaster represented the family of the Duke of Lancaster (John of Gaunt), the *third* son of the same king.

corresponds to the Roman *Verulamium*, one of the oldest towns (perhaps, indeed, the oldest) in Britain.*

The first conflict between the Yorkist and Lancastrian forces took place on May 22, 1455. It was rather a skirmish in the streets and suburbs of the town, than a battle, in the usual acceptance of the term. The forces of the king were on their way towards Ludlow, in Shropshire, the castle of which was the residence of the Duke of York, and where he had taken up arms. As they left St. Albans, they saw the hills in their front covered with armed men, under the banner of York. The Yorkists forced the barriers of the town, and a brief struggle ensued in the streets, the result of which was the defeat of the royalists, who fled in disorder, leaving behind them the weak king, Henry VI., who was found concealed in the house of a tanner, and remained a prisoner in the hands of his foes.

2. BLORE-HEATH, the scene of the second conflict between the rival houses, September 23, 1459. is a less-known locality. It lies within the county of Stafford, between seven and eight miles N.W. of the town of Eccleshall — not far from the Shropshire border, and little more than two miles distant from Market Drayton, in the last-named county. The adjoining high ground to the eastward belongs to the watershed between the basins of the Trent and the Severn.

Earl Salisbury, the father of the famous "king-maker," Warwick, was marching southward from Middleham Castle, in Yorkshire (the ancestral residence of the Nevils), to join the forces under the Duke of York, which lay within the Welsh marches, when he found his progress opposed by a Lancastrian army under the command of Lord Audley. The Lancastrians had the superiority in point of numbers, but the military skill of Salisbury ensured a victory to his followers. Lord Audley perished on the field of battle, with two thousand of his men.† A conflict which a few weeks later impended between the armies ranged under the rival standards, in the neighbourhood of Ludlow, was averted by the desertion of a considerable body of Yorkist troops (then recently brought over from Calais by the Earl of Warwick) to the Lancastrian cause.

* See *ante*, p. 92. The present name is derived from the martyrdom of Alban (a citizen of the town, and the proto-martyr of Britain), in the persecution under Diocletian. A.D. 297.

† A monument marks the spot where the Lancastrian leader fell. Queen Margaret beheld the battle from the neighbouring church-tower of Mucklestone, little more than a mile to the northward.

3. NORTHAMPTON.—The battle of Northampton (July 10, 1460) was fought in the meadows to the south of the town, which is situated on the left or northern bank of the river Nen, in the most central part of England.

A Lancastrian army, under Queen Margaret and her husband, was encamped in the neighbourhood of Northampton, when the Earl of Warwick, who had crossed the Channel (from his government of Calais) towards the end of June, 1460, landed on the coast of Kent. The few followers whom Warwick brought with him swelled to a numerous army, as his popular banner was displayed. Passing through London (the young prince, Edward, heir of York, riding by his side) the Earl advanced rapidly into the midland counties, and met the Lancastrian force at Northampton. The battle resulted in the complete defeat of the Lancastrians: great numbers of the nobility and gentry belonging to that party were slain, and the king was a second time made prisoner — his queen (with her son, Prince Edward) effecting her escape, and ultimately succeeding in reaching Scotland.

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4. WAKEFIELD is a considerable town — a great market for the agricultural produce of the adjacent district — in the West Riding of Yorkshire. It stands on the left bank of the river Calder (an affluent of the Yorkshire Ouse), in the centre of a fertile tract of country, now extensively intersected with lines of railway and canal, and exhibiting every attribute of commercial industry.

The battle of Wakefield was fought within less than six months after the Lancastrian defeat at Northampton, on the last day but one of the year 1460. The scene of the battle was the ground then called Wakefield Green, lying between the town of Wakefield and the now ruined castle of Sandal, which the Duke of York had occupied.

The undaunted Margaret of Anjou, after her escape from the field of Northampton, had again roused her supporters to action, and was ere long at the head of an army of 20,000 men. "Soon (says the historian) the gentle hills of England glittered again with hostile lances, and hostile bands, collecting from all quarters, advanced to meet in two great armies." Their respective leaders were, on the one side, the Duke of Somerset, with the Earls of Northumberland

and Durham, and other supporters of the Lancastrian cause; on the other, the Duke of York in person, aided by the Earl of Salisbury (Warwick's father). The Yorkists imprudently gave battle with very inferior forces, and the Lancastrians gained a bloody victory. The Duke of York was slain, and his head was afterwards, by orders of Margaret, stuck over one of the gates of the city of York. His second son, a boy of twelve or thirteen, flying from the field, was murdered in cold blood by the hands of Lord Clifford. The Earl of Salisbury, escaping from the scene of slaughter, was pursued, taken during the night, and beheaded.

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5. The battle of MORTIMER'S CROSS followed quickly upon the slaughter at Wakefield. The locality is a few miles distant from the town of Leominster, in Herefordshire, in the direction of W.N.W., within the fertile valley of the Lugg (an affluent of the Wye), and nearly adjoining the right bank of that stream. Two roads—one of them coincident with the ancient line of highway between the Roman stations of Magnæ (Kentchester) and Bravinnium (Leintwardine), and bearing the name of Watling Street—intersect one another at the spot known as Mortimer's Cross.* The village of Kingsland, a former inheritance of the Mortimers, is two miles to the S.E. of this spot, and is about twice that distance from Leominster. The immediate site of the battle was Kingsland Field, a level plain of some extent, stretching to the southward of Mortimer's Cross, and intersected by a brook which joins the Lugg.

By the death of his father at Wakefield, the title of Duke of York had devolved on Edward, previously Earl of March, who, with an army principally collected in the Welsh marches, and greatly augmented by the indignation felt among the vassals of the house of Mortimer at the recent cruelties of the Lancastrians, put himself in motion northwards, to meet the victorious queen. Margaret, meanwhile, had divided her army—sending one detachment, under the command of Jasper Tudor (Earl of Pembroke, and half-brother to King Henry) against the army of Edward, while with the other and

* A column erected at this spot, at the close of the last century, commemorates the battle.

larger division she herself advanced along the high road to London. Edward encountered the forces of Pembroke at Mortimer's Cross on the 1st of February, and gained a complete victory.

6. The second battle of ST. ALBANS followed closely on that of Mortimer's Cross. Queen Margaret, advancing with the main body of her army towards London, and flushed with her success at Wakefield, fell in near the town of St. Albans with a Yorkist army under the Earl of Warwick. The troops of Warwick occupied the hills to the south-east of the town, and the engagement consisted of a running fight maintained upon the undulating country betweeen St. Albans and Barnet. The Earl's forces were beaten at all points, and he was obliged to retreat: the last stand in his favour was made by the Kentish men upon Barnet common.

Notwithstanding the success of her arms on this occasion, the Queen's army were compelled to retire northwards, while the junction of Edward's army with the broken forces of Warwick enabled the Yorkists to obtain possession of the metropolis, the citizens of which were throughout devoted to the cause of the White Rose.*

7. TOWTON, YORKSHIRE.—Towton is a hamlet in the West Riding of Yorkshire, lying between ten and eleven miles to the S.W. of the city of York, and little more than two miles south of Tadcaster, on the river Wharfe. The battle of Towton was fought on Palm-Sunday (March 28), 1461. The field of battle lies about midway between Towton and the neighbouring village of Saxton, to the left of the high road which connects the towns of Tadcaster and Pontefract.†

The spring of 1461 had seen Edward of York seated on the throne of England, as King Edward IV. But the Lancastrians, with Margaret of Anjou and the Duke of Somerset at their head, were collected in great force behind the Trent and the Humber, numbering

* The victories of Wakefield and St. Albans (second battle of that name) were the only two important successes gained in the open field by the Lancastrians, until the final contest at Bosworth.

† A contest at Ferrybridge, over the river Aire, where the main line of road crosses that river (two and a half miles north-east of Pontefract) preceded the bloody encounter at Towton. Lord Clifford, the Lancastrian leader, was slain at Ferrybridge.

not less than 60,000 men. Edward, by advice of Warwick, determined to meet them on their own ground. A larger number of men were engaged at Towton than had been the case in any of the preceding conflicts, and the battle was in all respects a sanguinary one. It commenced in the midst of a violent snow storm, and lasted from nine in the morning until three in the afternoon, when the Lancastrians were driven from the field by the victorious Yorkists.*

The victory of Towton seemed to assure permanent repose to Edward's followers. By the time that he met his first parliament, in November of the same year, no opposing force remained in the field. But Margaret of Anjou was at large, and was still undaunted and active.

The years 1463 and 1464 were troubled ones, and only the vigilance and conduct of Warwick and his brother Montague preserved the safety of Edward's throne. In 1463, Margaret (who had passed over to France, in search of aid to her cause) landed on the coast of Northumberland. The castles of Alnwick, Bamborough, and Dunstanborough yielded to her, but were subsequently retaken by Warwick. In the following year, she was again in the field, but was defeated, first at Hedgeley Moor, and afterwards at Hexham, by Montague, Warwick's brother.

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8. The site of the battle of HEDGELEY MOOR is seven miles south-east of the town of Wooler (Northumberland) at the spot known as Percy's Cross. The hamlet of High Hedgeley is a short distance off, further to the south-eastward. The date of this engagement was April 25, 1464.

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9. HEXHAM, NORTHUMBERLAND.—Hexham is a well-known market-town on the south bank of the river Tyne. It lies not far distant from the line of the old Roman Wall between the Solway and that river. On May 15, 1464, Montague surprised there the Lancastrian leader, Somerset, who was captured and subsequently beheaded.

About a year after the battle of Hexham, the Lancastrian king, Henry VI., who had lurked for some time among the moors of West-

* Thirty-eight thousand men, in all, are said to have perished on the field of Towton. Edward had ordered that no quarter should be given. The Duke of Somerset, with Queen Margaret, her husband and her son, escaped to York, and thence into Scotland.

moreland and Lancashire, fell into the hands of the Yorkists, and was carried prisoner to London. He was then lodged in the Tower, to remain captive until the "king-maker"— seven years later — should recall him, for a brief while, to sovereign power.

During the six years that followed the battle of Hexham, no Lancastrian army appeared in the field. But the discontent of the Nevil family — by whatever cause engendered — rendered Edward's position unsafe and perilous. During Warwick's residence at his government of Calais, in 1469, a rebellion, of which it is difficult to define the precise objects, broke out among the peasantry of Yorkshire, and soon spread widely. Edward made vain attempts to suppress it, but was obliged to retire into the castle of Nottingham. A battle was fought at *Edgecote*, near Banbury* (July 26), in which a royalist army, under the Earl of Pembroke, was defeated by the insurgents, the earl himself, with 5,000 of his men, perishing on the field.

At Wolvey (or Olney), near the town of Nuneaton, in Warwickshire, Edward was surrounded by his foes, and was only saved by the return of Warwick to England. Thence Warwick took Edward — either as guest or prisoner — to his castle of Middleham.

In the following year (1470) another insurrection broke out in Lincolnshire, but was suppressed by Edward in a battle fought at *Erpingham*, in Rutlandshire.† Immediately after this, we find Warwick in open hostility to the king, but obliged to disband his forces for a time, and to seek a retreat at Calais, which place, however, he found closed against him. Thence Warwick sailed to the coast of Normandy, and it was in the old chateau of Amboise, while dwelling in Normandy as the guest of Louis XI., the French king, that his alliance with the Lancastrian party was negotiated. Then follows the great romance of the "king-maker's" life.

In September, 1470, Warwick landed on the coast of Devon, and within a few days thousands flocked to his popular standard. He marched at first towards London, but, changing his direction, followed the movements of Edward, who had retired from the capital northwards, towards the Trent. On the banks of the river Welland, the van of Warwick's army was within half a day's march of Edward, to whom no resource was left but precipitate flight. He embarked at Lynn, and reached the coast of Friesland a fugitive

* Edgecote is six miles to the north-east of Banbury, and within the Northamptonshire border.

† Erpingham, or Empingham, is five miles distant from the town of Stamford, under the name of which place the engagement here referred to is mentioned by some writers.

and a beggar. Warwick retraced his steps to London, and placed King Henry again upon the throne.

The flight of Edward lasted only five months. By aid of the Duke of Burgundy, his brother-in-law (known in history as Charles the Bold), he reappeared in March, 1471, off the English coast, and landed at Ravenspur,* on the Humber, with 1,200 followers. When the Yorkists had crossed the Trent, they were upon their own ground, and Edward's little band of followers soon swelled into a king's army. Warwick was not unprepared to meet his foe. Near Coventry — whither the Lancastrian army, under Warwick and Clarence (who was married to Lord Warwick's daughter) had advanced — Clarence and his followers assumed the White Rose, and Warwick was compelled to decline a present engagement. Edward advanced to London, and was again a king. He stayed in the capital, however, only two days, and then, taking the great north road, advanced with his followers to meet the army of Warwick. The hostile forces met upon Gladsmoor Heath, immediately north of the town of Barnet.

10. The battle of BARNET was fought upon Easter-Sunday, April 14, 1471. The town of Barnet lies upon the line of the great north road from London, immediately within Hertfordshire, but closely adjacent to the Middlesex border. It stands upon ground of considerable height — said to have been occupied, in early Saxon times, by a thick wood, which was granted to the monks of St. Albans, to whom the origin of the place is due.† It first became a market-town under Henry II.‡

The open ground to the north of the town of Barnet is now known as Hadley common. A column erected, a century and a quarter since, upon the further side of this common, about a mile to

* Ravenspur stood on the north side of the Humber, and was then a frequent place of passage to or from the continent. Henry of Bolingbroke had landed there when he came to dethrone Richard II. The place has long since disappeared, having been washed away by the sea, in the course of the frequent changes which have occurred on that portion of the English coasts.—See *ante*, p. 67.

† The word *Bergnet*, under which name Barnet is referred to in early grants, is said to signify in Saxon, "a small hill."

‡ Barnet was early distinguished for its cattle-fairs. It still retains these; but the railway system has destroyed the importance which its position on the great high road from the metropolis northward long secured to it, as a medium of coach traffic.

the north of Barnet, and at the point where the great north road forks into two, commemorates the battle of Barnet—a conflict fatal to the Lancastrian party.*

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11. TEWKESBURY, GLOUCESTERSHIRE.—The town of Tewkesbury, in the extreme north-west of the county of Gloucester, close to the Worcestershire border, is situated on the left bank of the Avon, near the point at which that river joins the Severn. The ground in the immediate neighbourhood of the town is low, and liable to floods from the adjacent waters. Both rivers are crossed by bridges. At the time when the battle of Tewkesbury was fought, all the bridges over the lower Severn had been destroyed by the country people in those parts.

Upon the very day on which the battle of Barnet was fought, Margaret of Anjou and her son had landed on the English coast—at Weymouth, in Dorset.† The Lancastrian queen received the tidings of Warwick's defeat and death, but, encouraged by the great lords who still adhered to her, resolved to try the further issue of arms. Advancing, through Somerset and Gloucester, towards the Welsh border, with the intention of joining the forces under the Earl of Pembroke (Jasper Tudor), she found her progress stayed by the river Severn. Near Tewkesbury, situated where the Severn is joined by the Warwickshire Avon, the army of Edward, headed by him in person, came up with the Lancastrians, and a battle was fought in the fields lying immediately east of the town. This was on May 4,—three weeks after the battle of Barnet. The fight was short, but bloody: it ended in the complete defeat of the Lancastrians. The young Prince Edward, Margaret's son, was brutally murdered by the hands of the victor, and the queen herself remained a prisoner.

A fortnight after the slaughter of Tewkesbury, Edward of York entered London in triumph, at the head of 30,000 men. On the following morning, the unhappy King Henry (taken captive on the

* The battle of Barnet was on a scale of inferior magnitude, so far as the numbers engaged on either side is concerned, to some of the other contests of the period. But the results were decisive. Warwick and his brother Montague fell on the field, and their bodies, carried to London, were exposed to public gaze in the church of St. Paul. Few of the Lancastrian lords escaped from the field, and the triumph to Edward's arms was complete.

† Some writers say, at Plymouth.

field of Barnet), was found dead in the Tower. The triumph of the house of York seemed complete. But it was reserved for another field to terminate, fourteen years later, the disastrous Wars of the Roses.

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12. BOSWORTH, or Market Bosworth,* is a well-known town in the western part of Leicestershire, about eleven miles due west of the town of Leicester, and in the very heart of England. Bosworth is pleasantly situated upon rising ground, watered by several small streams, affluents of the river Anker, which flows for a short distance along the Leicestershire and Warwickshire border, a few miles S.W. of the town. The battle of Bosworth was fought on a spacious plain, which begins about a mile south of the town, and exhibits at the present time few traces of its condition at that day. The ground is now partly covered by wood.†

Richard III. had been two years and two months on the throne when the battle of Bosworth was fought. Henry, Earl of Richmond, who then represented the claims of the house of Lancaster, had landed at Milford Haven, marched through Wales, and thence, crossing the Severn, advanced into the heart of England. The battle of Bosworth, though decisive in its results, was on a scale much inferior to that of several of the preceding conflicts. Including both armies, there were not above 18,000 men on the field, and the greater part of these were not actually engaged in the fight.

The battle of Bosworth is regarded as the termination of the Wars of the Roses. The marriage of the victorious Richmond, become Henry VII., with the Princess Elizabeth of York, reconciled the claims of both houses. But when Henry had reigned scarcely two years, a final attempt to expel the house of Lancaster from the

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* By distinction from Husbands Bosworth, in the same county, six miles east of Lutterworth.

† A spring known as King Richard's well, from a tradition that the king quenched his thirst there during the battle, is shown to the curious inquirer. A monument was erected over it, half a century since, at the instance of Dr. Parr. The spot where Lord Stanley, after the battle, placed the battered crown of Richard upon the head of Richmond, is still known as Crown Hill. Numerous relics of the battle have been turned up at various times, by the spade or the plough.

throne was made on behalf of the impostor Lambert Simnel, really the son of a baker, but who claimed to be Edward Plantagenet, Earl of Warwick, son of the Duke of Clarence, and nephew of King Edward IV.* Simnel had found supporters in Ireland, and had been crowned in the cathedral of Dublin by the title of Edward VI. With a force chiefly composed of Irish and Germans, and under the leadership of the Earl of Lincoln and Lord Lovel, Simnel landed on the Lancashire coast, at the old castle known as the Peel of Fouldray,† and thence marched southward. King Henry, meanwhile, after passing through the eastern counties, had advanced into the centre of the kingdom. Thence proceeding northward, he encountered the army of the rebel leaders near the village of *Stoke*, situated on the brow of a hill, a short distance S.W. of Newark, and not far from the south bank of the Trent.

The battle of STOKE was fought on June 16, 1487. The insurgent army was completely routed, not however without an obstinate contest of three hours' duration. Simnel was taken prisoner. The Earl of Lincoln, with several other leaders of his party, died fighting. Lord Lovel was seen to escape from the field, but was never more seen, and it was supposed that he had been drowned in attempting to cross the river Trent.‡

A battle fought at BLACKHEATH, near London (June 22, 1497) belongs to this period. The contending parties were a body of Cornish insurgents on the one side, and the king's troops on the other.§ The men of Cornwall, to the number of 16,000, had marched

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* The real Earl of Warwick was at the time a prisoner in the Tower of London. Twelve years later, he was beheaded on Tower Hill, for alleged complicity in the schemes of Perkin Warbeck.

† A small island adjacent to the Furness shore, near the west side of the entrance of Morecambe Bay.

‡ Long after, when the race of the Tudors had gone to their account, and when the dynasty of the Stuarts had been driven out of the kingdom, — nearly two hundred years from the time of this forgotten battle of Stoke,—some workmen accidentally discovered a subterranean chamber at Minster Lovel, in Oxfordshire, the ancient seat of the adventurous lord. Within this chamber was a skeleton of a man seated in a chair, with his head resting on a table; and these sad relics were supposed, with some reason, to reveal a tale of horror.

§ This insurrection was indirectly connected with the pretensions of Perkin Warbeck. The taxes raised for the purpose of suppressing Warbeck's inroad from the Scotch border had seemed to press with undue severity upon the Cornish population, who thought themselves aggrieved at being called on to pay their share towards the defence of the northern frontier.

through the southern counties into Kent, and were encamped on Blackheath. Their leaders were Lord Audley, an attorney named Flammock, and a blacksmith of the name of Joseph. The royal forces were headed by Lord Daubeney and the Earl of Oxford, Henry himself, with a body of reserve, being stationed in St. George's Fields, on the south side of London. Lord Daubeney, after a sharp struggle at Deptford Bridge, drove in the advanced post of the insurgents and established himself on the heath, in front of the rebel forces, while Lord Oxford attacked them in the rear. The Cornishmen, though without horse or artillery, fought bravely, and did not yield until two thousand of their number were slain.*

FLODDEN.—The battle of Flodden, fought between the English and Scottish armies, on the 9th September, 1513, may be conveniently referred to in this chapter.

The site of Flodden is within the county of Northumberland, towards its extreme north, near the foot of the Cheviot Hills, and not far from the Scotch border. The tract of country which is here nearly enclosed between the streams of the Beaumont, the Till, and the Tweed, includes the fatal 'Flodden Field,' so often commemorated in Scottish history and song.

The river Till descends the south-eastern slope of the Cheviots, flowing first in an eastwardly and afterwards a northwardly direction. Within this part of its course, it bears the name of the Breamish. About midway between the small towns of Wooler and Belford, the stream turns to the north-west, and assuming thence the name of the Till, ultimately joins the Tweed upon its right bank—about 3 miles below the town of Coldstream, and 4 miles above the site of Norham Castle. The Till receives several small affluents on its left bank, the two most considerable of them

* Blackheath is a locality associated with numerous events of historic interest. Cade had encamped there with his rabble forces, in the insurrection of 1450. Foreign sovereigns or their representatives, upon occasions of visits to England, were frequently met there, on their arrival, by the delegates of the English government. When Charles II., after his years of exile, returned to his dominions, the army which had so often contended against his father in the field was drawn up there, to form, perhaps, in the reluctant welcome which its members accorded, the only exception to the enthusiastic burst of joy with which he was greeted by the nation at large.—Macaulay: chap. i.

being the Lill Burn, which passes Wooler, and the Beaumont or Glen river, which joins the Till at a point nearly three miles N.N.W. of the last-named town.* Below the junction of the Beaumont, a much smaller stream, the Pallins Burn (the whole length of which is only three miles), joins the Till on its left bank. Ford Castle, with the adjacent village of Ford, and likewise Twisell Castle, lie adjacent to the right bank of the Till, which is crossed, immediately below the latter, by Twisell Bridge. The remains of Wark Castle are on the right bank of the Tweed, between two and three miles above Coldstream.

The ground which lies west of the lower Till forms a moderately level plain of some extent. This is enclosed on all sides but the west by the courses of the Tweed, the Till, and the Beaumont or Glen river. Westward, it rises by a gradual ascent towards the hills which adjoin the right bank of the Tweed, immediately north of the Cheviot region. The extent of the plain is about eight miles in the direction of N.W. and S.E., by from two to three miles in the opposite direction. Its southward portion is known as Millfield Plain. The more central portion, within which are the village of Branxton and the little stream of Pallins Burn, formed the battle-field of Flodden. Two hamlets, distinguished as East and West Flodden, lie within this portion of the plain, about midway between Branxton and Millfield. The road between Coldstream and Wooler traverses the field of Flodden, passing immediately to the north of Branxton, and through the hamlet of Millfield, skirting the left bank of the river Till, and crossing the Beaumont or Glen river two and a half miles N.W. of Wooler. The road from Coldstream to Berwick, along the south bank of the Tweed, crosses the Till by Twisell Bridge.

* The tract included between the Breamish, Till, and Beaumont rivers, forms the true Cheviot region—that to which Cheviot Hill, 2658 feet, and Hedgehope, 2347 feet, belong. The upper portion of the Lill Burn valley intervenes between those hills.

The battle of Flodden was fought between the army of James IV. of Scotland, commanded by that monarch in person, and the English army under the Earl of Surrey. The Scotch king had made an inroad within the English border, and remained upon English ground in acceptance of Surrey's challenge to abide his attack. The English commander, who had not chosen to attack the Scots in the position which their king had first selected, finally advanced by the right bank of the Till, which river he crossed with his army at Twisell Bridge, to the *northward* of the position occupied by the Scottish army. The retreat of the Scots to their own side of the border was thus cut off, as the army of Surrey advanced from Twisell Bridge into the plain enclosed by the Till and the Tweed, with a view to occupy the high grounds above Branxton, and it became impossible to avoid a battle. Hence, in the contest, fatal to the Scotch, which ensued, the army of James occupied the more southwardly of the positions finally taken up by the respective armies on the field of battle, the English army facing them from the northward. The vanguard of the English had already advanced into the plain as far as the little stream of Palinsburn, when the Scotch army was discovered, advancing towards them. The battle began about 4 o'clock in the afternoon, and lasted until the carnage upon either side was stayed by night.

The fifteenth century, to which many of the occurrences referred to in this chapter belong, embraces perhaps a greater number of events important in the history of the world than belong to any similar period. The invention of Printing, the birth of Luther and prior dawn of the Protestant Reformation, the conquest of Constantinople by the Turks, the capture of Granada and expulsion of the Moors from Spain, the first passage to India by way of the Cape of Good Hope, and the discovery of the New World, all fall within its limits. The fifteenth century was in the truest sense an age of transition, one in which the traditions of former times were beginning to pass away, in which the intelligence and inquiring spirit of mankind were thoroughly aroused, and in which the fruits of this awakening were already becoming visible in the effects produced on the whole frame-work of society.

The changes, social and otherwise, that belong to the period, were not less important in the case of England than in other countries. The closing years of the 15th century saw the settlement of the house of Tudor upon the English throne. Already, before the date of the battle of Bosworth, the printing-press of Caxton had been set up within the precincts of Westminster. Before the century had

closed, the mariners of England were entering on the career of maritime adventure and discovery which the Portuguese and Spanish nations had hitherto engrossed to themselves.

From about the middle of the fourteenth century, the commerce and wealth of the English nation had begun to increase rapidly. The advance in these regards had steadily continued during the fifteenth century, and at the termination of the wars between the houses of York and Lancaster, notwithstanding the devastation by which they had been attended, the commercial prosperity of the English nation stood higher than at any former time.* Indeed the progress of that unhappy struggle was in no unimportant degree connected with the advancing trade of England, as well as with the growth of influence and intelligence on the part of the town populations. The popular leaning displayed, almost throughout, on behalf of the house of York, was in great measure the result of the favour with which the commercial interests of the citizens of London and other towns were regarded by the princes of that house. The citizens of London were almost uniformly supporters of the White Rose, and the towns in general, throughout the kingdom, followed the example of the metropolis. The prosperity of the traders of London was intimately connected with that of the Flemish merchants beyond the sea, and the citizens regarded with favour the alliance between Edward IV. and the Flemish Court.

THE HANSEATIC LEAGUE.—The growth of towns is intimately connected with the extension of commerce. As the citizens, with increasing numbers and trade, advance also in wealth and power, they are led to adopt measures of protection against the exactions of those feudal superiors by whom, in a former age, they would have been plundered of their earnings with comparative impunity. The risks to which, especially in an unsettled state of society, goods are necessarily exposed in their transit to distant markets, whether by land or sea, naturally lead merchants and traders to seek for means of protection against the losses to which they are thereby liable. For such purposes of self-protection, more than one league or union of cities was formed during the middle ages. The most important of

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* The merchants of Bristol, under Henry VI. and Edward IV., had ships of 900 tons burthen. The trade and even the internal wealth of England reached so much higher a pitch in the reign of the last-mentioned king than at any former period, that we may perceive the wars of York and Lancaster to have produced no very serious effect on the national prosperity.—Hallam: *Middle Ages*, chap. ix. part 2.

these was the famous Hanseatic League or Union, which was intimately connected, during a lengthened period, with the commerce of England. The *Easterlings*,* so often referred to in the pages of Hume and other historians, were the merchants of the Hanseatic confederacy, by whom nearly the whole commerce of northern and western Europe was long engrossed.

The formation of the Hanseatic league † dates from the middle of the 13th century. It was founded by the commercial cities which had grown up, in the course of the preceding century, upon the shores of the Baltic, and the traders of which determined to combine in a league of mutual defence against piracy and pillage, by sea or land. Eighty of the most considerable towns of northern and western Europe were at one time comprehended within the Hanseatic confederacy. These were divided into four companies or colleges, of which Lubeck, Cologne, Brunswick, and Dantzic were the representatives. Lubeck held the chief rank. It was the business of the league to discuss and regulate all matters,—whether mercantile, political, or military — that concerned the interests of its members. Hamburg, Bremen, Rostock, Stralsund, Weimar, Stettin, and numerous other towns, were members of the league. It had four principal factories in foreign parts; these were, London, Bruges, Bergen, and Novgorod. The sovereigns of the countries to which these cities belonged conferred important and exclusive privileges upon the merchants who were members of the confederacy, and during a term of three centuries nearly all the foreign trade of western Europe was conducted by their hands. In England, the merchants of the Hanseatic towns were erected into a corporation by Henry III., and endowed with special privileges which were preserved down to the reign of Edward VI.

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* From the *Ost See* (i. e. East Sea) the name given to the Baltic by the nations who dwell around its shores.

† The word Hanseatic is derived from *hansa*, a customs' league, or *hansen*, to associate. The four modern Hanse towns — Hamburg, Bremen, Lubeck, and Frankfort on the Main, preserve the memory of this famous league to the present day.

CHAPTER X.

ENGLISH GEOGRAPHY DURING THE TUDOR PERIOD.

The Tudor period of English history (1485–1603) exhibits, in higher measure than any other, with the exception of that comprehended within the last three quarters of a century, a rapid growth in all the elements of national greatness. The population made greater numerical advance during the sixteenth century than at any former period, and the manufactures, trade, and social condition of the people, exhibited equal progress.

POPULATION.—In the later part of the 14th century, at the close of Edward III.'s reign, the population of England and Wales does not appear to have exceeded two and a half millions;—i.e., only half a million beyond its amount at the time of the Norman conquest. In the later half of the 16th century, the population numbered probably not fewer than five millions. This increase is generally regarded as chiefly due to the period subsequent to the accession of Henry VII. to the English throne. During the seventy years which immediately preceded that event, the French wars of Henry V., and afterwards, the disastrous contest of the houses of York and Lancaster, had been attended by vast loss of life, and had tended to check any considerable addition to the numerical strength of the nation.*

The proportion which the town population bore to that

* The supposed large numerical increase of the English people during the sixteenth century has, however, been doubted.—See Froude, *History of England*, chap. i. All estimates of the population of England, prior to the sixteenth century, are little better than guesses. On the subjects treated in this Chapter, the student will consult with advantage Macaulay: *History of England*, chap. iii.

of the country at large continued to increase during the same period. In the latter part of the 14th century, England had fewer than thirty towns containing upwards of two thousand inhabitants each; only eight contained so many as five thousand inhabitants each, and only one, besides the metropolis, had upwards of ten thousand.* The entire town population at that period is estimated at about 170,000 persons, or little more than a fifteenth of the total population of the kingdom. This proportion was greatly exceeded in the time of Elizabeth, when the population of London alone amounted to not much less than a thirtieth of the numbers of the nation at large.

Towns. — The principal cities and towns of England took widely different places in the scale of relative importance, in the sixteenth century, from that which they occupy in the present day. The great seats of modern manufacture and commerce had then no existence, excepting as mere villages, or at most, as unimportant towns, with only a few hundreds of inhabitants; while the older cities in the more strictly agricultural parts of the island (now diminished, with few exceptions, to places of third or fourth-rate rank, in respect of population), were then amongst the most populous centres of wealth and industry. York, which is now exceeded in number of inhabitants by above a score of other places, was then second only to the metropolis in point of population as well as dignity. Liverpool, which has now nearly half a million of inhabitants, and surpasses any other place in the kingdom, except London, in point of population, was in the middle of the 16th century an insignificant port,

* London had then (1377) about 35,000 inhabitants; York, nearly 11,000; Bristol, 9,500; Plymouth and Coventry, 7,300 each; Norwich, 6,000; Lincoln and Salisbury, about 5,000 each; Lynn, 4,700; Colchester, 4,400; Beverley and Newcastle-upon-Tyne, 4,000 each; Canterbury, 3,900; Bury St. Edmund's, 3,700; Oxford, 3,600; Gloucester, 3,400; Leicester, Shrewsbury, and Yarmouth, about 3,000 each; Hereford, 2,800; Ely and Cambridge, 2,500 each; Exeter, Worcester, and Hull, 2,300 each; Ipswich, Northampton, Nottingham, and Winchester, between 2,300 and 2,100 each. None of the other towns had so many as 2,000 inhabitants.—*Pictorial History of England*, book v. chap. 7.

with fewer than a thousand inhabitants and scarcely more than two hundred tons of shipping.

Next to London, the most considerable shipping ports of England, in the 16th century, were Bristol, Hull, Yarmouth, and Harwich. After these came Newcastle-upon-Tyne, Boston, Lynn Regis, Southampton, and Plymouth. The Cinque Ports, on the coasts of Kent and Sussex, though still retaining most of their ancient privileges, had lost much of the importance which belonged to them at an earlier date.* Among the most considerable

* The Cinque Ports, originally, as the term implies, five in number, were certain ports on the coasts of Kent and Sussex, the importance attaching to which from their geographical position with respect to the opposite shores of the Continent, especially upon occasions of war, early led to their endowment with special immunities and privileges at the hands of successive English monarchs. Three of these ports—Dover, Sandwich, and Romney,—possess charters originally conferred by Edward the Confessor, and afterwards confirmed by William the Conqueror. The extension of like privileges, at a somewhat later date, to Hythe and Hastings, led to the bestowal of the term 'Cinque Ports' as a collective designation of what were long accounted 'the five principal havens' to which the early kings of England looked for naval service and aid on occasions of threatened invasion, or danger to be encountered by sea. Rye and Winchelsea were subsequently added to the list of privileged ports, making the number seven, but the appellation 'Cinque' was still retained. To each of these seven municipalities there were attached subordinate members. Thus, Folkestone, a few miles west of Dover, was a dependent 'limb,' or member, of that port; similarly, Deal was a member of the port of Sandwich, to which it was annexed in the 13th century. The entire organisation of the Cinque Ports comprehended 5 corporations, with 12 unincorporated members; the body being presided over by a Lord Warden, whose office, now little more than nominal, is retained to the present day. The rights and privileges of the Cinque Ports were expressly recognised by Magna Charta and special charters have been granted to them by various sovereigns of England, from Edward I. down to Charles II.

In return for the privileges and immunities which they enjoyed, the Cinque Ports were bound to provide a certain number of ships, with their specified quota of men, for the defence of the coast, when called upon to do so by the sovereign, and to maintain them at their own cost for the term of fifteen days. If their services were required for a longer period, the additional expense of victualling and wages was defrayed by the state. By the terms of Edward I.'s charter, fifty seven ships in all, each with 21 men on board, had to be provided every time the king crossed the seas. To this equipment, Dover contributed 21 ships, Hastings the same number, Sandwich five, and the smaller ports various minor contingents, according to their respective sizes.

The establishment and growth of a national navy—begun under Henry VII.—prepared the way for the decline of the Cinque Ports

seats of manufacture or inland trade, were York, Coventry, Norwich, Chester, Worcester, Exeter, Winchester, Lincoln, Salisbury, Colchester, Leicester, Shrewsbury, Ipswich, and Northampton. Several of the older corporate towns, however, were declining in population, owing to the injurious influence which their restrictive privileges exerted upon trade, in the limitations imposed upon the exercise of particular branches of industry. This was the case with York, Chester, Lancaster, Coventry, Lincoln, and Winchester; while other places, where no such restrictions existed, were flourishing, by means of the industry which they attracted thence. Birmingham and Manchester were already fast rising in importance, the former by means of its hardware trade, the latter by its manufacture of rugs, friezes, and other woollen goods. Taunton, Bridgewater, Chard, and other places in the west of England, were already famous for their broadcloths; Worcester, Evesham, Droitwich, Kidderminster, Bromwich, and Coventry, also shared in the cloth-manufacture.*

London, in the time of Elizabeth, had vastly outgrown its earlier dimensions. Its population was not much under 150,000. It was then, as it continued to be down to a much later period, a walled city. The circuit marked out by the walls — extending from the Tower on the east to Blackfriars on the west, and reaching from the river northward to Moorfields—was little more than two and a quarter miles; and the whole space comprehended within the walls was considerably less than one square mile. At various points, however, upon the east, north, and west, the buildings of the London population stretched beyond the walls, and the single bridge which crossed the Thames connected

as a privileged community. The changes effected by the hand of nature contributed to the decay of several among them—as Sandwich, Romney, Rye, and Winchelsea—the ancient harbours of which have become either partially or wholly choked by the accumulation of sand. Many of their peculiar privileges, however, have only been taken away within the present century.

* Pictorial History of England; book vi.

the city with its populous suburb of Southwark. But Westminster was still a distinct city, and the long roadway of the Strand, beginning to be lined on either hand with the mansions of the nobility — had to be traversed in communicating between the two. The village of Charing* formed a resting place upon the way. Clerkenwell, already a populous resort, lay a considerable distance beyond the city precincts, forming a somewhat distant suburb of the metropolis, and Islington was a country village. So also was St. Giles's, upon the great western highway of Holborn, though buildings were fast advancing in that direction. Along the line of Bishopsgate and Shoreditch, also, the buildings already stretched far beyond the city gates. But in other quarters the open and almost untenanted space known as Moor Fields reached close up to the city walls: the names of Spittle Fields and Finsbury Fields denoted like open and comparatively waste localities.†

London is one of the oldest of English cities. It had held the rank of a colony under the Romans,‡ and filled a conspicuous place throughout the Saxon period. It ranked in the sixth century as the capital of the East Saxon kingdom, and at a later time became, alternately with Winchester, the capital of Saxon England. Bede, at the beginning of the 8th century, speaks of London as a great market, which traders frequented both by land and sea. During the reign of the early Norman kings of England, the royal treasure was still kept at Winchester. But from the time of Henry II. downward, London became the sole seat of government, and the sole capital of the realm.

London advanced rapidly under the Plantagenet kings.

* The present Charing Cross.

† Such names as Hatton Garden, Saffron Hill, Mount Pleasant, and numerous others of like import, often met with in neighbourhoods now densely populated, preserve the memory of the open (or nearly open) country through which they once formed a way. Shakspeare makes Gloucester refer to the 'good strawberries' which he had seen, when last in Holborn, in the garden belonging to 'my lord of Ely.'—(Richard III., Act iii. scene 4.)

‡ See *ante*, p. 92.

Already, in the reign of the 'lion-hearted' son and successor of Henry, the display of wealth made by its citizens is said to have attracted the admiring envy of the German barons who accompanied the king on his return to England, after his release from captivity. In the 14th century, its population within the walls numbered probably from 35,000 to 40,000. This was independent of its already extensive suburbs.* By the middle of the 16th century, the number of its inhabitants had increased to threefold this amount. The rapidly growing magnitude of the metropolis had been the occasion of needless alarm to the ruling powers of the realm, and Elizabeth issued many proclamations designed to check the great increase in the number of new buildings, without, however, producing much effect. Edicts to the same purpose, and with as little result, were renewed by her immediate successor.†

The name of London Wall, applied to a well-known thoroughfare in the metropolis, preserves to popular knowledge the course which a portion of the ancient city enclosure took.‡ In like manner, the names of Ludgate, Newgate, and other well-known appellations, serve to indicate the localities of the gates by which alone, in former times, the city was entered. Of these gates, there were — from Blackfriars to the Tower — seven: viz., Ludgate, Newgate, Aldersgate, Cripplegate, Moorgate, Bishopsgate, and Aldgate.

That portion of the present city area which immediately adjoins Ludgate on the west (the modern Ludgate Hill and Fleet Street) was not included within the London of the Elizabethan period. The Temple Bar of our day did not then exist, but its place was marked by an open railing or palisade, which was closed at night, or on occasions of danger, with a barricade of chains and posts.

The river Fleet, which limited Blackfriars to the west,

* Hallam: *Middle Ages*, chap. viii.

† Hume: Appendix to reign of James I.

‡ The line of Walbrook (the Wall Brook) marks the western border of the earlier London of the Roman period.

then flowed as an open stream, meandering through the pleasant fields on the north side of the Thames, as did the Effra and other streams to the south of the river. The Fleet was traversed by bridges across the lines of the present Fleet Street and Holborn. The name of Holborn Bridge preserves to the present day the familiar record of a stream which has long ceased to serve any other purpose than that of an underground sewer.*

The direction of the chief highways, and also of the cross-streets and lanes, of the London of Queen Elizabeth's day, coincided in most regards with those of the modern metropolis. Cheapside, Lombard Street, Eastcheap, Fenchurch Street, Fish Street, Gracechurch (i. e. Gracious) Street, Bishopsgate and others, already bore, and had indeed long previously borne, their distinguishing names.

The site of Westminster Abbey, in proximity to which a city (long separated from London by a wide intervening space of open country) had grown up, had been originally insulated by a branch of the Thames. The low and marshy tract thus enclosed by the river was known as Thorney Island. A religious edifice had existed upon this spot as early as the 7th century. The magnificent abbey-church of the present day dates from various periods between the reigns of Henry III. and Henry VII., and occupies the site of the prior structure erected by Edward the Confessor. The abbey of the Confessor had fallen greatly to decay in the time of Henry III., and was hence taken down, and the building of the newer edifice commenced.† Westminster Hall, between the Abbey and the river, owes its erection to William Rufus.

York, situated on the pleasant banks of the Ouse, in the midst of the most extensive river-valley in the island,

* The Danish king, Canute, had sailed up the Fleet as high as Holborn Bridge.

† Every sovereign of England, from William I. downwards, with the sole exception of Edward V., has been crowned in Westminster Abbey, and several of our kings have been interred there.

had from very early times ranked second only to the metropolis in point of dignity. It was the Roman *Eburacum*, and the *Eoforwic* of the Saxon period. During the later period of Roman rule in Britain, York may indeed be in some measure regarded as the capital of the Roman province. The emperor Severus died there, as also did Constantius Chlorus, the father of Constantine the Great.

York was the capital of the Saxon kingdom of Deira, and afterwards of Northumbria. The magnificent minster of York is of Norman date, but occupies the site of an early Saxon edifice, built by Edwin, King of Northumbria, in 625. Its castle dates from the time of William the Conqueror. At the time of the conquest, York is said to have had 10,000 inhabitants.*

Bristol, situated on the north bank of the Avon, eight miles above its entrance into the sea was the great port of the western counties, and the rival of London in point of foreign commerce. Bristol had existed in the earlier portion of the Saxon period.† As early as the reign of Henry II., it was rich and flourishing, carrying on trade with Ireland, and also with foreign countries. Its manufactures, too, were early important, and it supplied great part of the kingdom with woollen goods, as well as with sand and glass. The 15th and 16th centuries form the most flourishing period of its history. The merchant adventurers of Bristol had a large share in the early voyages of discovery on the opposite side of the Atlantic. Cabot and his sons had settled there towards the close of the 15th century, and the first attempt at the colonisation of Newfoundland was undertaken thence. The population of Bristol were long conspicuous for the extent to which they engaged in

* The printing press was introduced into York comparatively early after its first appearance in Britain—thirty-eight years later than the date of Caxton's labours in Westminster.

† Probably, indeed, during the Roman and antecedent British period. The name *Bricgstow* appears to be of Saxon origin, and to indicate a place of passage over the Avon, or else the passage of the river through the rocks immediately below the town (at the modern Clifton).

colonial traffic, and the thriving trade which its merchants carried on with the English plantations in North America and the West Indies continued to enrich the town.*

HULL stands on the north side of the Humber estuary, at the point where it receives the river Hull, and constitutes the chief outport for the extensive region of the united Ouse and Trent drainage. Before the close of the 13th century, the town which occupied the site is said to have been called Wyke-upon-Hull. Edward I., in 1296, changed the name to Kingstown-upon-Hull (in distinction from Kingstown-on-Thames), and began the formation of its harbour. The place had already a good trade in the export of wool and leather, and from this date increased rapidly. Edward granted a charter by which it was constituted a free borough, and Hull had at one time a mint of its own.

In 1339, when Edward III. invaded France, Hull supplied sixteen ships and 500 men, while London contributed on the same occasion no more than 25 ships and 700 men. Charters were granted to Hull by several successive monarchs, and Henry VI. bestowed on it the privileges of a distinct county.†

Both YARMOUTH and HARWICH were relatively much more important in the 16th century than at the present day. Yarmouth existed in the time of Domesday. Under Henry III. the town was fortified, being surrounded by a wall and moat. If it be true, as stated, that 7000 of its inhabitants died of the plague in 1348, it must have been at that time one of the most populous places in the kingdom.‡

* See Macaulay's account of Bristol at a later period.—*History of England*, chap. iii.

† Towards the close of the 15th, and afterwards in the 16th and early part of the 17th centuries, Hull suffered greatly from pestilence, half its population perishing from this cause.

‡ The moderate number of its population, a generation later in date (see *ante*, p. 186), may be explained by this circumstance.

Harwich is of Saxon (if not of Roman) origin, and early became important after the era of the Conquest. Its position with respect to the continent long rendered it a chief place of departure and arrival to and from the Low Countries, and thence to other parts of Europe.

BIRMINGHAM.—The manufacturing greatness of Birmingham is of modern date, but the origin of this capital of the iron district dates as far back as the time of Alfred. The town is mentioned in Domesday-book.

Birmingham early acquired a reputation for its iron-wares. It is described by Leland, in the 16th century, as "a good market-town," of which the beauty was "one principal street, a quarter of a mile long." It was "inhabited by smiths, that use to make knives, and all manner of cutting tools, and many lorimers that make bits, and a great many nailors."*

SHEFFIELD, the capital of Hallamshire (as that part of Yorkshire which borders on the county of Derby has been called from a very ancient period), stands in the fertile valley of the Don, where it is joined by the little stream of the Sheaf. Like our manufacturing towns in general, Sheffield owes its greatness chiefly to modern enterprise, but the characteristic feature of its industry had belonged to it from an early date. At the close of the 13th century, the town had already acquired repute for its arrow-heads, and its well-known "whittles," or knives.†

In the later half of the 16th century, the growing prosperity of Sheffield received an impulse from the persecutions of the Duke of Alva, in the Low Countries. Of the numerous artisans driven to emigrate thence into England, the workers

* During the Civil War, the people of Birmingham supplied great quantities of sword-blades to the Parliamentary forces. They refused compliance, however, with the King's demand for a like service. The making of fire-arms was not introduced into Birmingham until the beginning of the last century.

† They are mentioned by Chaucer, in the Canterbury Tales.

in iron were settled at Sheffield, on the estate of the Earl of Shrewsbury, then chamberlain to Queen Elizabeth. Mary Queen of Scots passed fourteen years of her weary imprisonment successively in Sheffield Castle and the Manor-house of that name, in the custody of the sixth Earl of Shrewsbury. In the time of Queen Elizabeth's successor, however, Sheffield is described as a singularly miserable place, containing about two thousand inhabitants, of whom a third were half-starved and half-naked beggars.*

NORWICH, the largest city (next to London) on the east side of the island, and the capital of the eastern counties, was relatively much more important and considerable in the 16th century than at the present day. Its origin dates from early Saxon times, when it grew up coevally with the decay of the old Roman station, Venta of the Iceni (situated at Caistor, three miles to the southward), and relatively to which it became designated as the North-wic, or town. The fortress which occupied the site of the present castle had been the residence of the East Saxon kings. Norwich grew rapidly into importance, and is said to have already had, in the time of Edward the Confessor, 1320 burgesses and 25 parish churches.

The manufacturing greatness of Norwich dates from the time of the early Norman kings. In the time of Henry I. a colony of Flemings settled at Worstead—a village situated twelve miles to the north-eastward of Norwich, and brought with them the practice of their handicraft skill in the making of woollen fabrics.† These settlers finally took up their abode in the city of Norwich. The branch of industry which they had introduced continued to flourish, and other colonists from the same region settled in the locality at various subsequent times. In the time of Henry VI., the woollen manufactures of Norwich entered into compe-

* Macaulay: *History of England*, chap. iii.

† The name of *worstel*, applied to a particular kind of woollen texture, was originally derived from this place.

tition in the foreign markets with similar fabrics produced in the parts of the continent whence the art had been introduced. Four thousand Flemings settled at Norwich in the early years of Elizabeth's reign, and the practice of their art became greatly extended. New textures, composed of mixed wool and silk, were invented, and the fabric known as bombazine was produced in 1575. Norwich has never ceased to retain its reputation for works of such a description down to the present day, though long since greatly surpassed in population by the manufacturing cities of the north-western district.

MANCHESTER (the Roman *Mancunium*) dates its origin from an early period. It was in Saxon times the abode of a thane, and is mentioned in Domesday as being in possession of a church. Its inhabitants had acquired some reputation for manufacturing skill at a very early period. In the reign of Edward II., Manchester—in common with many other places in Lancashire and Cheshire—was known for its friezes and "cottons." These last, however, were in reality a species of woollen fabric, and the introduction of the vegetable fibre (the produce of the cotton-plant) which has made Manchester so flourishing in modern times dates from a comparatively late period.* A number of Flemings settled in the town during the reign of Edward III., and Manchester soon became famous for its rugs and friezes.

LIVERPOOL has throughout grown in importance coevally with the increase in the manufacturing prosperity of South Lancashire and the adjacent parts of Cheshire, of which it forms the chief outport. It is less ancient than Manchester. No mention of it occurs in Domesday-book, whence its origin is generally referred to a period subsequent to the Norman conquest.†

* Cotton appears to have been first brought to Manchester from Smyrna and Cyprus in the early part of the 17th century. Its manufacture cannot be traced farther back than the reign of Charles I.

† The derivation popularly attributed to the name of this town — now

Liverpool received its first charter of incorporation from Henry II. in 1173. King John conferred on its inhabitants a second charter, and a third was granted by Henry III. In 1565, however, Liverpool contained only 138 householders, and owned 223 tons of shipping. The first dock (and long the only one) that it possessed was not constructed until upwards of a century after the close of the Tudor period of English history.

ROADS.—Nothing in the condition of modern England contrasts more strongly with its aspect at a former period than the means of conveyance from place to place—whether as regards the roads themselves, or the vehicles by which they are traversed. The Romans were probably the earliest road-makers in Britain, and their public ways—designed principally for military uses—have survived in part even to the present day.*

We know little about the means of communication between place and place enjoyed by our ancestors during the Saxon and early Norman periods. But they must have been exceedingly imperfect. The first law relating to public highways (i.e. roads leading from one market to another) was passed in 1235, under the vigorous administration of Edward I. This act was chiefly designed for the prevention of robberies, of which the roads were then the frequent scene. The "bushes, woods, or dykes," upon either side of the way, served to shelter robbers. In the reign of Edward III. a toll was levied for the repair of the highways. This related exclusively to the thoroughfares leading out of London, which "by the frequent passage of carts, wagons, and horses," were become so miry and deep as to be almost

the second place in Britain in point of population, and the largest seat of foreign trade in the world — calls up images that contrast strikingly with its condition in the present day. A bird called *the liver* (apparently one of the ibis tribe) is said to have frequented a marshy pool once existent where the lower portions of the town now stand. The corporate seal of Liverpool bears the image of this bird.

* See *ante* p. 85.

impassable. No further enactment of the kind appears until the reign of Henry VIII., in which several laws were made for the altering and repairing roads in various parts of the kingdom. Six acts relating to the highways were passed during the brief reign of Mary, and no fewer than nineteen during that of Elizabeth. Notwithstanding these enactments, the public roads, throughout the kingdom, were everywhere narrow, full of holes, deep ruts, and crossed by water-courses — to such an extent as to be often almost (and not seldom altogether) impassable. This was the case even with the great public highways connecting the larger towns, and with the cross-roads between small country places it was naturally still worse. Nor did any considerable improvement take place until a much later period.*

The ordinary mode of travelling in early days, and down to a much later date than the close of the Tudor era, was on horseback. Coaches are said to have been introduced into England in the reign of Elizabeth, by a Dutchman, but the use of wheeled carriages, at least for occasional purposes, is of much earlier date.† Heavy wagons, for the conveyance of passengers as well as goods between the large towns, were gradually coming into use during the later portion of Queen Elizabeth's reign. But the internal traffic of the kingdom was chiefly conducted by means of pack-horses, as indeed a large proportion of it continued to be down even to the beginning of the 18th century. The travelling merchants of those days journeyed, for the sake of mutual protection, in parties of forty or fifty; the long train of horses in single file, headed by one which had a bell attached to his head-gear, winding slowly along the devious tracks which the roads of those early times generally formed. On a humbler scale, the pedlar, himself on foot, but often attended by a

* A vigorous sketch of the state of travelling in England a century after the Tudor period is given by Macaulay: *History of England*, chap. iii. See also *Pict. Hist. of England*, book VI. chap. iv.

† Stage-coaches for public travelling were not introduced until the middle of the 17th century. The earliest extant notice respecting them dates from 1658. Hired carriages (hackney-coaches) were used in London as early as 1625.

pack-horse, journeying between town and town, and visiting the mansions of the gentry by the way, was a necessary agent in the internal traffic of the country. The periodical fairs, or markets, held in all the great towns, served an important purpose in the transaction of commerce, which was indeed their primary object. Traders from all parts of the kingdom met there, exchanged their various produce, and made their wholesale purchases for the requirements of the intervening period until the fair again came round. The sales of woollen cloths, kerseys, linens, leather, and other commodities, were thus transacted at the great fair of St. Bartholomew, held annually in Smithfield. The sale of horses and cattle, and of butter, cheese, and other articles of farm produce, was similarly conducted.*

AGRICULTURE.—During all the earlier period of our history, and down even to a recent date, England was chiefly an agricultural country. The national wealth was supplied by the labours of the husbandman, but these consisted rather in the pursuit of pasturage than of tillage. Wool was the staple of the kingdom. From the 12th century downwards, the English wool had been increasingly in demand in foreign countries.† The Flemish manufacturers were its principal consumers, but it was largely used in the towns of France also. With the growth of manufacturing industry on the part of the English themselves, the demand for wool continued to increase, and it became more profitable to use land for pasturage than for tillage. The extensive conversion of the soil to the rearing of sheep and cattle attracted the notice of the legislature, and many fruitless efforts were made during the 16th century to arrest its pro-

* A large portion of the commerce of continental countries—especially in the centre and east of Europe, is still conducted in this manner. The great fair of Nijni-Novgorod, in central Russia, is an example. The sports and festivities which attended the fair, and which ultimately became, at least in our own country, its main characteristic, were in the origin adjuncts only to its prime purpose, that of trade.

† In 1279, in a petition to Edward I., the nobles asserted that the wool produced in England, and mostly exported to Flanders, was nearly equal to half the land in value.

gress. The total extent of land under cultivation, tillage and pasturage included, bore at that time but a small proportion to the whole area of the kingdom. Large tracts of country continued, even at a much later period, to be altogether uncultivated and unenclosed.*

Wheat, barley, rye, and oats, constituted in the 16th century the chief crops of the farmer. But wheaten bread was only consumed, as a general rule, by the higher classes of society: the poorer classes ate bread made of barley or rye, and in times of scarcity, beans, pease, and oats, contributed largely to their subsistence. Tare and lentils served to appease the wants of hunger on occasions of more than ordinary scarcity, from failure of harvests or otherwise. Many additions to the objects of the cultivator's skill were made during the 16th century. It was not until the end of Henry VIII.'s reign that any salads, carrots, turnips, or other edible roots, were produced in England. The little of these vegetables that was used was formerly imported from Holland and Flanders.† The use of hops, and the planting of them, was introduced from Flanders about the beginning of the same reign, or the end of the preceding. The cabbage, the pale gooseberry, and according to some, the apricot and the musk-melon, were introduced about the same period. The artichoke was first cultivated in the reign of Henry VIII.: pippins were introduced about 1525: currants, from Zante, in 1555: the cherry about 1540: and several varieties of the plum, from Italy, about 1510. The common walnut (a native of Persia) was introduced in 1562. The attractions of the flower-garden were also increased. The gilliflower, the carnation, and the rose of Providence, were brought in by the Flemings who settled in Norfolk about 1567. The musk-rose and the damask-rose were first grown in England about the same period.‡

* See Macaulay, chap. iii. as to the time of Charles II. In the present day, the total area of cultivated land, arable and meadow land included, is fully equal to five-sixths of the entire kingdom.

† Queen Katherine, when she wanted a salad, was obliged to despatch a messenger to Flanders on purpose. (Hume, chap. xxxiii.)

‡ Many of the ornaments of the English garden had been derived, at

James I. sought to introduce the rearing of silk-worms into England, and mulberries were planted with that view. The culture of the hop became greatly extended during his reign.

MINERALS.—Nothing is more characteristic of the industrial wealth of the English nation in the present day than the vast amount of mineral produce. During the Tudor period, and indeed for long after, the *tin* which the mines of Cornwall supplied was by much the most valuable of English productions in this regard.* The working of copper was almost neglected. A copper mine was worked near Keswick as early as 1250, and Edward III. granted a patent to certain persons for the working of all "mines of gold, silver, and copper." But the quantity raised was exceedingly small. Acts were passed both under Henry VIII. and Edward VI. to prevent the exportation of brass and copper, "lest there should not be metal enough left in the kingdom fit for making guns and other engines of war." Soon after the beginning of Queen Elizabeth's reign, the discovery of a new copper mine in Cumberland so greatly increased the supply that it began to be again sent abroad.†

Iron-works already existed in the southern counties—chiefly Kent, Surrey, and Sussex—but they had not

an earlier date, during the era of the Crusades, from the eastern shores of the Mediterranean. The pilgrims who returned from the Holy Land brought with them the ranunculus, the narcissus, and other bulbs, with several varieties of the rose and other attractive productions of eastern climes.

* Tin-mines had been worked from a period of remote antiquity at various places round the shores of Cornwall—chiefly in the south-western district of the county. In the reign of King John, the mines in the west of England appear to have been principally in the hands of the Jews. The remains of furnaces, called Jews' houses, have been discovered from time to time, and small blocks of tin, known as *Jews' tin*, have not unfrequently been found in the mining districts. The name of Marazion, (or Market Jew), a town at the head of Mount's Bay, is additional evidence of the connection here referred to.

† The copper of Cornwall does not seem to have been worked until the beginning of the 17th century.

prospered greatly, and were regarded unfavourably both by the government and the nation at large. Wood was employed for smelting the ore, and in the reign of Elizabeth there were loud complaints that whole forests were being cut down for the purpose of feeding the furnaces. In 1558, and again in 1580 and 1584, acts were passed to prohibit the erection of new furnaces within a certain distance of the metropolis, with a view to the preservation of the woods from destruction: but the wealds of Kent, Sussex, and Surrey, were exempted from the operation of the two earlier statutes. The manufacture, however, languished, and the smelting of iron ore became gradually transferred to other parts of the kingdom, where the abundance of coal—then coming fast into general use—rendered the use of any other fuel superfluous.*

Coal is first mentioned in the reign of Henry III., in an order for inquisition into trespasses committed in the royal forests, issued in 1245.† Sea-coal is here spoken of, an expression which evidently implies that coal had been brought to London by sea before that date. The use of coals in furnaces and forges, by smiths, brewers, &c., was becoming common in London towards the end of the 13th century. Before the close of the 14th century, an active trade was carried on in the conveyance of coal by sea, from Newcastle-upon-Tyne to London and elsewhere. The citizens on several occasions petitioned against the growing use of this mineral, on account of alleged unhealthiness from the smoke, the dirt, and other annoyances. Laws were enacted to limit its use, which still went on. The employment of coal, however, was long confined to the purposes of the forge. Its use as household fuel was only gradually becoming general in the reign of Elizabeth.‡

* Up to within the last century and a half, Sussex was the chief seat of the iron produce of England. The last furnace, at Ashburnham, was blown out so recently as 1827.

† Pictorial History of England, book iv.—Sea-coal Lane, a well-known thoroughfare in London (between Skinner Street and Farringdon Street) is mentioned by that name in a charter of the year 1253.

‡ James I. early took measures (in 1606) to promote the introduction

Foreign Commerce.—Prior to the Tudor period, the foreign commerce of England was for the most part confined to the Low Countries. The Netherlanders bought the English commodities—of which *wool* and woollen goods constituted by much the largest items, amounting to nine-tenths of the whole—and either consumed them for their own uses, or distributed them to other parts of the Continent. Hence the mutual dependence of England and the Low Countries on one another, and the great inconvenience and loss sustained by both upon occasions of rupture. This trade was long carried on principally, indeed almost wholly, by foreigners—chiefly the people of the Hanse towns, or Easterlings, so often mentioned in early English history, and many of whom were settled in London and other English ports.

Henry VII. (a peace-loving, and also a money-loving, sovereign) gave great encouragement to trade and manufactures. He formed commercial treaties on a wider scale than any previous ruler of England, and opened a larger field to the commerce of the nation. Denmark, Norway, and Sweden, in the north; France, Brittany, Normandy, Dantzic, Eastland, Friesland, in the west of Europe; Spain, Portugal, and Italy (Pisa, Florence, Venice, &c.), in the south; were thus brought into direct commercial relationship with England. During the reign of his successor, although the navy was for a time neglected, yet the foreign trade of the kingdom continued to flourish, and within the last ten years of Henry VIII.'s reign great additions were made to the naval resources of the kingdom.

A vast accession to the foreign commerce and industrial resources of England took place during the reign of Elizabeth. The field of enterprise had become greatly enlarged by the geographical discoveries of the preceding half cen-

of the Scotch coal into his southern kingdom, "to the end that by its more common use people may leave off burning wood, and felling in the forests in England, which are already much wasted." In 1615, the Newcastle coal-trade employed 400 vessels—200 for the supply of London, and as many more for the rest of England.

tury, and Englishmen were visiting, in pursuit either of trade or of other objects (sometimes of less praiseworthy description), the most distant lands and seas. Trading voyages to Guinea and Brazil had become frequent during the reign of Henry VIII.* Within the same period, the "tall ships" belonging to London, Southampton, and Bristol, traded to Sicily, Candia, and Khio, and sometimes to Cyprus, as well as to Tripoli and Beyrout, on the Syrian coast. Their outward cargoes consisted of woollen cloths, calf-skins, &c.; and they returned home laden with silks, camblets, rhubarb, malmsey, muscadel, and other wines, oils, cotton, wool, Turkey carpets, galls, and Indian spices. One of these voyages up the Mediterranean usually occupied a whole year, and was accounted exceedingly difficult and dangerous.†

The English trade with Russia dates from the reign of Queen Mary, who granted a charter to the Russia Company.‡ Mr. Arthur Jenkinson, acting as agent for this Company, and seeking to extend its commercial operations into Asia, journeyed in the years 1588-90, through Russia, down the Volga to Astrakhan, and thence across the Caspian Sea, and through Persia to Bokhara, which city was the resort of merchants from the most distant parts of Asia.

* In 1530, Captain William Hawkins of Plymouth (father of Sir John Hawkins), made the first trading voyage to Guinea for elephants' teeth, &c., and thence proceeded to Brazil. Such voyages soon became common.

† Pictorial History of England, book vi. — Foreign vessels as well as English were employed by the merchants engaged in this trade—among them, Candiots, Ragusans, Sicilians, Genoese, Venetian galleasses, with Spanish and Portuguese ships. The foreigners also traded to our shores on their own account. The last of the Venetian argosies that visited this country, a great vessel of 1100 tons, was wrecked on the Needles, off the Isle of Wight, in 1587, and all the crew and passengers, with the exception of seven persons, perished. In 1605, James I. granted a charter of incorporation to the Levant or Turkey Company, which long continued to carry on a lucrative trade with Turkey.

‡ Russia (or Muscovy) had first become known to the English through the voyage of Sir Hugh Willoughby, in 1553, in search of a north-east passage to the Indies. Willoughby himself perished on the coast of Lapland, but Richard Chancellor, who commanded one of the ships belonging to the expedition, entered the White Sea, and, travelling overland to Moscow, had a personal interview with the Czar.

The Newfoundland fishery dates from the reign of Henry VIII: it originated in 1536, and grew rapidly into a source of national wealth. The northern whale-fishery soon followed. The hardy seamen of Biscay were the first to engage in this. The first date of such adventure on the part of the English is 1593, in which year some English ships made a voyage to Cape Breton, to fish for morse and whales: before the close of the century, the ships of the Russia Company were occasionally engaged in the capture of whales in the seas about Spitzbergen.*

The reign of Elizabeth witnessed the origin, on the part of England, of the iniquitous slave-trade, a branch of traffic which continued to disgrace the nation from that period down to within little more than half a century from the present time. Captain (afterwards Sir John) Hawkins commenced this traffic in 1562. Learning that negroes brought a good price in Hispaniola, he fitted out three ships, which he partially filled with English goods, and sailing to the coast of Guinea, obtained a cargo of three hundred human beings. He sold these, with his other ventures, in Hispaniola, and freighting his ships with hides, sugar, ginger, and other like commodities, including some quantity of pearls, returned home in 1563, having made a highly prosperous and profitable voyage.

Antwerp, on the Scheldt, was throughout the 15th and greater

* In 1577, there were (according to Hakluyt) above three hundred vessels engaged in the Newfoundland fishery. Only fifteen of them were English, the greater number belonging to the French, and next after them to the Spaniards and Portuguese. Hakluyt accounts for the small number of English ships that resorted to Newfoundland by the fact of a great many being employed in the Iceland fisheries. The English, however, had the best ships, and gave the law to the rest, protecting them in the bays from pirates and intruders, in acknowledgement of which service it was customary for the other ships to present them with a boat-load of salt, or something of that kind. In the following reign, the Greenland whale-fishery was largely engaged in by the English — at first as an individual venture, but afterwards by the Russia Company, and, for a time, by ships belonging jointly to the Russia and the East India Companies. The earliest mention of whalebone being brought home is in 1617, previous to which date, the blubber alone was the object of desire. —*Pictorial History of England*, book vii.

part of the 16th century, the great port of the Low Countries, and the most flourishing emporium of European commerce. Its capture and plunder by the Spaniards, under the Duke of Parma, in 1558, gave a shock to the whole commercial system of Europe. The rapid advance of manufacturing industry in our own country dates from this event. Great numbers of the manufacturers and merchants who wrought and dealt in silks, damasks, taffeties, and other wares, settled in England, and taught our countrymen the practice of their skill. Prior to this date, Antwerp had been the chief medium of exchange between Britain and the countries of the continent. The commerce which its traders maintained with Britain in the earlier portion of the reign of Elizabeth is thus described: — "To England, Antwerp sent jewels and precious stones, silver bullion, quicksilver, wrought silks, cloth of gold and silver, gold and silver thread, camblets, grograms, spices, drugs, sugar, cotton, cummin, galls, linen both fine and coarse, serges, demy ostades, tapestry, madder, hops in great quantities, glass, salt-fish, metallic and other merceries of all sorts, to a great value; arms of all kinds, ammunition for war, and household furniture. From England, Antwerp receives vast quantities of fine and coarse draperies, fringes, and other things of that kind, to a great value; the finest wool, excellent saffron, but in small quantities; a great quantity of lead and tin; sheep and rabbit skins without number, and various other sorts of fine peltry and leather; beer, cheese, and other sorts of provisions in great quantities; also Malmsey wines, which the English import from Candia.

"To Scotland, Antwerp sends but little, as that country is chiefly supplied from England and France. Antwerp, however, sends thither some spicery, sugars, and madder, wrought silks, camblets, serges, linen and mercery. And Scotland sends to Antwerp vast quantities of peltry of many kinds, leather, wool, and indifferent cloth, fine large pearls, though not of quite so good a water as the oriental ones.

"To Ireland, Antwerp sends much the same commodities and quantities as to Scotland; and Antwerp takes from Ireland skins and leather of divers sorts, some low-priced cloths, and other gross things of little value."*

* Guicciardini, quoted in Anderson's History of Commerce, vol. ii. (London, 1787.)

CHAPTER XI.

COMMENCEMENT OF ENGLISH COLONISATION.

"WHAT chiefly (says Hume) renders the reign of James memorable, is the commencement of English colonies in America; colonies established on the noblest footing that has been known in any age or nation."*

The Spaniards, within the half century which followed the discovery of the New world, had established their dominion over nearly every maritime region of tropical America, whether on the islands or the mainland. Brazil, the only considerable exception, had fallen to the share of Portugal. But the adventurers of either nation had happily left unregarded the vast extent of coast stretching along the Atlantic to the northward of Florida. This territory, for the most part temperate in climate, and endowed with sufficient fertility of soil to yield a moderate return to the hand of industry, became during the 17th century the home of great numbers of the English nation, destined in the course of the succeeding century to form a powerful and independent community.

FOUNDATION OF JAMES TOWN, 1606.—The name of Virginia had been bestowed by Queen Elizabeth upon the region discovered by the adventurers whom Sir Walter Raleigh had despatched in search of lands suitable for colonisation upon the other side of the Atlantic. The schemes of Raleigh, like those of Sir Humphrey Gilbert, resulted only in failure. The first party of colonists whom Raleigh sent to Virginia (in 1585), were brought back to England,

* History of England, Appendix to James I.

in the following year, by Sir Francis Drake. The fate of a subsequent body of settlers in the same region was never ascertained.

But the project of settlement in Virginia was never wholly abandoned by the English nation. Some occasional intercourse with the natives of that region was maintained by the merchants both of London and Bristol, who found it profitable to traffic with them in the exchange of beads, knives, combs, and various trinkets, for furs and skins. Raleigh's attainder and sentence annulled the privileges granted by the exclusive patent which he had held, and the unoccupied regions of the west became open to new projectors. In 1606, James I. granted charters to two companies; one, that of the London Adventurers, or South Virginia Company, to whom was given authority to plant settlements on that portion of the American coast situated between the parallels of 34° and 38°: the other, the company of Plymouth Adventurers, who had assigned them a like privilege in respect of the country northward from lat. 41° to 45°. The London Company sent out, in the same year, a body of settlers who founded the settlement of *James Town*, on the north bank of the Powhattan (or, as it was afterwards called, the James River), above 40 miles above its mouth.* The colony thus planted was never abandoned, though once on the point of being so. The settlers were often reduced to great difficulties, notwithstanding the supplies forwarded from England for their use. What served most to contribute to the prosperity of the settlers was the culture of tobacco, which rapidly became an article of consumption in the mother country. In 1610, the London company obtained a second charter, conferring on them additional privileges, and empowering the planters (as the settlers were called) to exercise the rights of self-government, by means of a resident council and other officers.

BERMUDA ISLANDS, 1612.—Sir George Somers and Sir

* The site of James Town was afterwards abandoned, and hardly a vestige of the buildings now remains.

Thomas Gates, two of the captains employed by the London Company, were, in 1609, in the course of an outward voyage to Virginia, wrecked on the little group of islands now known as the Bermudas. This name is derived from Juan Bermudez, a Spanish navigator, who had first visited them in 1522. The English, however, regarded themselves as the discoverers of this attractive group of islands, on which they resided for a period of nine months, and the name of Somers' Islands was hence conferred upon them. A settlement was made on these islands, in 1612, by a company chartered for the purpose by the King.

NEW ENGLAND, 1620.—English colonisation in the West —slow and unsteady in its progress — might have failed to produce any important results, had not other principles and motives than those due to the spirit of commercial enterprise aided its advance. The religious intolerance which drove conscientious Englishmen from their homes, to seek freedom of worship in accordance with the dictates of their conscience, proved the most important means of peopling the vast wilderness of the western world. The "Pilgrim Fathers" landed in 1620 on the shores of New England, and founded the town of *Plymouth*—situated in what afterwards became the state of Massachusetts, 36 miles S.E. of the city of Boston. Plymouth was the earliest in date of the New England settlements, and the nucleus of the various flourishing communities which shortly after grew into existence in that region.

The circumstances under which the settlement of Plymouth was founded are in every way remarkable, and the tale of the "Pilgrim Fathers" is among the most instructive in history. A congregation of English nonconformists, holding its meetings at Scrooby, a village situated in the county of Nottingham (near the borders of York and Lincoln), were the occasion of its origin. The annoyances which those who dissented from the doctrines of the Church experienced, on the part of the ruling powers, shortly after the accession of James I., became so intolerable to the Scrooby congregation that its members determined on self-expatriation. They had heard that in the Low Countries

religious freedom was allowed, and that some of their persecuted countrymen had there found a refuge, and there they accordingly determined to seek a home.

Even this expedient had to be prosecuted by stealth. Under colour of a royal proclamation, forbidding the King's subjects to transport themselves to Virginia without his special license, or upon some other pretence, the embarkation of the Scrooby villagers was obstructed by the authorities. Their first effort to leave their native shores, in 1607, was unsuccessful, many suffering imprisonment in consequence of the attempt. In the following year, embarking at a place on the Humber, between Grimsby and Hull, under circumstances of much difficulty and even danger, some of them succeeded in getting away. These were afterwards joined by such as had from necessity been in the first instance left behind, and the scattered flock was at length collected at Amsterdam.

The exiles found at Amsterdam a London congregation, which had emigrated some twelve or fifteen years before, and also the Gainsborough congregation, former neighbours of their own. They remained, however, a distinct community, and after the lapse of a few months determined to remove to Leyden — then recovered from the devastation which had attended its famous siege of thirty-five years before, and containing a population of 70,000 souls. The Scrooby nonconformists abode at Leyden during twelve years. They "fell to such trades and employments as they best could, and many came unto them from divers parts of England, so as they grew a great congregation." Their actual numbers can only be conjectured, but even when at the largest are not supposed to have counted more than between 200 and 300 adult persons. Their uprightness, diligence, and sobriety gave them a good name and pecuniary credit with their Dutch neighbours.

But although their industry had improved the outward circumstances of the self-exiled Englishmen, the experience of a few years' residence in the Low Countries decided them against remaining as permanent settlers in a foreign land. They still loved their native country, and were anxious to retain the privilege of shelter under her authority. Various motives combined to direct their eyes towards the regions of the distant west, then, as during the whole of the prior century, the object of regard to enterprising spirits of every nation of Europe. They accordingly entered into negotiations with the Virginia Company of London, for a settlement within part of the extensive tract over which their charter gave them authority, upon the Atlantic shores of the New World. Terms were at length agreed on. Two vessels, sent over to Holland for the purpose, received the exiles with their families, and carried them

—the one to Southampton, the other to London, prior to their final embarkation. These two ships were the "Speedwell" of 60 tons burthen, and the "Mayflower," of 180 tons. The vessels ultimately joined company at Southampton, and put to sea with about 120 passengers. Before they had proceeded far on the voyage, the "Speedwell" proved so unseaworthy that it was thought prudent to return, and both vessels put in at Dartmouth. Repairs having been made, they sailed a second time. But again, when a hundred leagues from land, the master of the smaller vessel represented her as incapable of making the voyage, and they were under the necessity of putting back to Plymouth. There was no other resource than to divide the company, leaving some of their number behind, while the rest pursued their voyage in the larger of the two ships. Accordingly, the "Mayflower" again put to sea with a prosperous wind, the final sailing of the pilgrim ship being on Sept. 6th, 1620.*

Little is recorded of the incidents of the voyage, the earlier part of which was favourably made. As the wanderers approached the American continent, they encountered storms which their overburthened vessel was scarcely able to sustain. Their destination was a point near the Hudson river, within the wide-spread territory over which the jurisdiction of the London Virginia Company extended, by the terms of its patent. At early dawn of the sixty-fourth day of the voyage, they came in sight of the white sand-banks of Cape Cod. In pursuance of their original purpose, they veered to the south, but, by the middle of the day, found themselves, "among perilous shoals and breakers," which caused them to retrace their course.† The "Mayflower" rounded the narrow and curve-shaped peninsula which terminates in Cape Cod, and finally dropped her anchor within the basin which it encloses, at noon, upon a Saturday, near the close of autumn. The exact date was November 11, 1620. A document, drawn up for the purpose, and signed by the pilgrims, declared them to constitute a "civil body politic," for the purpose of

* The colonists, men, women, and children, embarked on board the "Mayflower," were 102 in number. "Concerning very few of them (says the historian of New England) is it known to this day from what English homes they came." Only two amongst them are ascertained to have been members of the Scrooby congregation, which had undergone various changes during the residence of its members at Leyden. Amongst the pilgrims of the "Mayflower" was Miles Standish, a soldier by profession, and apparently induced to join their band either from personal good-will towards some of its members, or from love of adventure, or both motives combined.

† It was afterwards said that the master of the vessel took them purposely astray, influenced by a bribe from the Dutch, who were averse to their settling near the Hudson river. There is, however, no certain evidence of any such want of good faith.

planting a colony in the northern parts of Virginia, in subjection to the supreme authority of the English crown, and competent to frame such laws as were requisite for the government and well-being of the whole. The voyage thus happily terminated is known in American history as that of the "Pilgrim Fathers."

Such was the beginning of the New England Colonies — a commencement truly noble, and affording matter of juster pride to those who were engaged in it than many an enterprise undertaken under more attractive auspices, and aided by the patronage of great names. Throughout its existence as a distinct settlement, the population of Plymouth continued to be a humble community, alike in numbers and in wealth. "When four years had passed, the village consisted only of thirty-two cabins, inhabited by 180 persons. Six years later, it numbered 300 persons, and five years after this, it had added 200 more; and at the end of its life of seventy years, its population, scattered through several towns, had probably not come to exceed eight thousand."*

The colony of MASSACHUSETTS was founded in 1622, under the auspices of "the Dorchester Adventurers," a joint-stock association formed in London for the purpose. The first party of colonists settled, in 1623, at Cape Ann (to the northward of Boston), where the town of Gloucester now stands. A royal charter was afterwards obtained (1629), constituting the Dorchester Company a separate body, under the name of "the Governor and Company of Massachusetts Bay, in New England." In 1630 Charlestown (a present suburb of Boston) was made the capital of the Massachusetts Colony, and the names of Boston, Dorchester, and Watertown, were assigned to the localities which still bear them. A portion of the Charlestown people subsequently removed to Boston, on account of the ample supply of water found on the peninsula which forms its site, and to the deficiency of which at Charlestown an epidemic sickness was ascribed.

* Palfrey: History of New England (London: 1859).

The colony of CONNECTICUT was planted in 1635 — in the first instance by settlers who migrated to the banks of the Connecticut river, from the Massachusetts settlement. RHODE ISLAND became similarly the seat of a distinct settlement in 1636. The town of Providence was founded on a tract of ground purchased from the Indians by Roger Williams, who had been banished from the Massachusetts colony, the settlers in which were but too ready to put in practice, towards those which differed from them in opinion, the same species of tyranny as that from which they had themselves suffered in their native country.

A charter of incorporation was granted to the Rhode Island settlers in 1643, under the designation of "the Incorporation of Providence Plantations in Narragansett Bay."

Emigration from the mother-country to the New England Colonies ceased with the meeting of the Long Parliament, in 1640. It had begun in 1620, but did not become considerable until ten years later, when the Massachusetts settlement had become definitely planted. Ten years later it ceased: nor was the stream of emigration thither renewed, to any considerable amount, for nearly two centuries. By 1640, it is estimated that about 21,000 Englishmen (or 4000 families, in all), had arrived in New England. During the succeeding century and a quarter, more people left the colony to return to England than went from England thither.* But the settlers grew in numbers, notwithstanding, and continued, year by year, to subdue larger portions of the American wilderness to their use.

In 1643, the four principal New England settlements — Massachusetts, Plymouth, Connecticut, and Newhaven — formed themselves into a political confederacy, entitled "the United Colonies of New England." Almost at the same time, the English Parliament instituted a commission (consisting of six lords and twelve commoners, with the Lord

* Palfrey: History of New England.

Admiral, the Earl of Warwick, at their head), for the government of the American colonies. This commission was practically inoperative, for the colonists had already taken the management of their local interests into their own hands. In 1662, a second charter was granted by Charles II. to "the English Colony of Rhode Island and Providence Plantations, in New England."

MARYLAND, 1634.—While the Puritan settlers were subduing to their use the wilderness of New England, the followers of an older, but proscribed faith, had found for themselves a home upon a portion of the American coast lying only a few degrees to the southward, and within the original limits of the Virginia Company's extensive grant. A part of this tract of country was in 1632 granted by Charles I. to Lord Baltimore, the name of Maryland being bestowed upon it in honour of the Queen — Henrietta Maria. Lord Baltimore was a Roman Catholic, and within two years of the date of the grant a body of settlers of that faith were established on the banks of the Chesapeake river. The New England settlers manifested some hostility towards their Roman Catholic neighbours (between whom and themselves, however, a wide extent of country intervened), but the Catholic colony continued to flourish, and remained a place of refuge for such members of the older church as were driven from England by the severity of the penal laws directed against their religion.

CAROLINA, 1663.—Carolina was first permanently settled by the English in 1663. Charles II., in that year, made a grant of the province to Lord Clarendon and others.*

* Carolina derives its name from Charles IX. of France, during whose reign a party of Huguenot settlers, under Jean Ribault, had visited this tract of coast, giving the name of Port Royal to the island on which they designed to plant their colony. This was in 1562. The French settlers were shortly after attacked and driven out by the Spaniards, who, however, made no permanent settlement in this region: the country remained unoccupied for nearly a century, until the date of the English settlement.

Beaufort, on Port Royal Island, was the first settlement made in the southern portion of the province, in 1670. North and South Carolina were recognised as distinct colonies in 1719.

NEW YORK, 1664. — The river Hudson had been discovered by the English navigator, Henry Hudson, in 1609, in the course of a voyage undertaken in the service of the Dutch.* A settlement was shortly after formed upon its banks by that nation. The Dutch settlers first erected Fort Orange, on the present site of Albany, in 1613,† and in the following year erected some fortifications, to which they gave the name of New Amsterdam, at the southern point of the island of Manhattan, between the mouth of the river Hudson and Long Island Sound. The site of New Amsterdam is now included within the wide area of New York, which name, however, was not conferred until long afterwards. The adjacent territory was then known by the name of the New Netherlands, which it retained until the conquest of the Dutch settlements by the British in 1664. The Dutch regained possession of New Amsterdam in 1673, but it was restored to the English in the following year, and remained in the hands of the English nation down to the date of American independence.

NEW JERSEY, 1664. — New Jersey, a small but productive range of coast lying between the Hudson and Delaware rivers, was first settled by the Danes and Swedes, in 1624. The Dutch (already established on the Hudson) took forcible possession of it in 1655, and retained it until 1664,

Raleigh's abortive efforts at colonisation, in 1585 and the succeeding years, were directed to a region (Albemarle Sound) within the limits of what is *now* known as North Carolina, but which fell within the Virginia of that period.

* The same navigator, in his latest voyage, 1610, discovered the extensive bay which bears his name, and within the waters of which he perished, abandoned by his mutinous crew.

† Albany is, next to James Town, the oldest settlement in the United States.

when it was conquered, with the Dutch settlements adjoining, by the English.

DELAWARE was first settled by the Swedes, in 1638, in pursuance of a plan of colonisation which had been favoured by Gustavus Adolphus, and six years after the death of that monarch on the field of Lutzen. The territory was designated New Sweden. The Swedish settlers were however compelled to yield to the Dutch, and subsequently the territory passed, with the adjoining Dutch settlements, into the hands of the English. Delaware was granted, in 1682, along with Pennsylvania, to William Penn.

PENNSYLVANIA, 1681.—The Swedes had made some settlements within this tract of country, in 1638. These fell successively into the hands, first, of the Dutch, and afterwards, of the English planters. In 1681, William Penn, the celebrated Quaker, obtained a grant from Charles II., in virtue of which he planted a colony there, and in the following year founded the city of Philadelphia, upon a tract of ground purchased for the purpose from the Indians.

GEORGIA, 1732.—This was the latest of the English settlements upon the seaboard of what has since been known as the United States. Georgia was first planted in 1732, during the reign of George II.

The English colonies on the Atlantic seaboard, then thirteen in number, and extending from the border of New Brunswick southward to Florida, asserted their independence in 1776, and, after a struggle of several years' duration, obtained in 1783 a recognition on the part of Britain of their existence as an independent nation, under the name of the United States of North America. The names of the thirteen states, enumerated in geographical succession, from north to south, were:—New Hampshire, Massachusetts, Rhode Island, Connecticut, New York,

New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia.*

THE WEST INDIES.—The first efforts at colonisation, on the part of the English nation, in the Islands of the Western Indies, date from the early years of the reign of James I. Hawkins, Drake, and other English sailors, had during the preceding reign attacked and plundered the Spanish settlements in that region, but had made no attempt at permanent conquest. The island of Barbadoes, now the most popular and flourishing amongst the Lesser Antilles, was the earliest of the English acquisitions in that quarter.

An English merchant-ship, homeward-bound from the coast of Guinea,† had been accidentally led to visit Barbadoes in 1605, and the master of the vessel took possession of the island in the name of the King of England. No attempt at settlement was made at the time. Nearly twenty years later (1624) a party of English adventurers settled on the island, under the sanction of a patent granted by the King to Lord Leigh, afterwards Earl of Marlborough, and Bridge Town was founded. In 1627, the rights of the Earl of Marlborough were purchased by the Earl of Carlisle, who obtained from King Charles a charter, granting him the property of the island. Down to the year 1641 the only produce of Barbadoes consisted of tobacco (of indifferent quality), with a little cotton and ginger, but the sugar-cane was introduced from Brazil in that year, and the plantations

* Maine, the northernmost state of the Union, was originally a part of Massachusetts, though separated from it by the intervening territory of New Hampshire. The possession of Vermont, before the war of independence, was disputed between the provinces of New Hampshire and New York.

† This, like many other occurrences in the history of early navigation, illustrates an important condition of physical geography. Both winds and ocean-currents, within the tropics, have a westwardly direction, and vessels navigating the Atlantic within low latitudes are hence impelled to a course which carries them towards the western side of that ocean. It was thus that Cabral, in 1500, fell in with the coast of Brazil in the course of an outward voyage from Portugal, round the Cape of Good Hope, to India. Ships engaged in the Guinea trade frequently made the West India Islands in the course of their homeward voyage.

shortly, after became greatly extended. The proprietary government was surrendered to the crown, by purchase, in 1662. During the protectorate, the Barbadoes planters remained faithful to the royal cause, but were at length compelled to surrender to a parliamentary force, under Sir George Ayscue, in 1652. The island has never been captured by a force belonging to any other nation, but has remained permanently in English possession.*

The islands of ST. CHRISTOPHER (in 1623), NEVIS (in 1628), ANTIGUA (in 1632), and MONTSERRAT (1632), with some of the adjacent islands, were all colonised by the English within a period of ten years—the first named while James I. was on the English throne, the three others during the reign of his successor. The plantation of these islands was due mainly to the enterprise of Sir Thomas Warner, a merchant of London. Two years after St. Christopher had been first planted by the English, some French settlers went there. The French and English agreed to divide the island between them. The French settlers subsequently expelled the English, and maintained possession of the island for a time. The English portion was restored in 1668. In the following year, the English were again driven out, but in 1690 the island was captured by a British force. At the treaty of Ryswick (1697) the former French portion was restored to that nation, but the treaty of Utrecht (1713) provided for the cession of the whole island to Britain. Nevis has followed, for the most part, the fate of St. Christopher.

Antigua, first planted (by settlers from St. Christopher) in 1632, was in 1663 granted by Charles II. to Lord Willoughby. It was attacked by the French in 1667, and remained for a few months in the hands of that nation, but was restored to England in 1668, and has since remained in undisputed possession of Britain. The neighbouring island

* After the battle of Bothwell Bridge (1679) three hundred of the unfortunate Covenanters were shipped off to Barbadoes, and perished on the voyage.

of Barbuda was colonised by some settlers from St. Christopher, in 1628. Montserrat, which had been similarly planted, was captured by the French in 1664, but restored in 1667, at the peace of Breda.

The BAHAMA ISLANDS were occupied by the English at about the same period as the islands above mentioned. New Providence, one of the group, was colonised in 1629. The Spaniards, in 1641, drove away the English settlers, but they returned in 1666. In 1703, the English were again expelled, by the French and Spaniards unitedly, but they subsequently regained possession, and remained masters of this and others of the islands until 1781. The Spaniards then took forcible possession of these islands, which, however, were restored to England in 1783, and have since remained in the undisturbed possession of Britain.

JAMAICA (1655).—The island of Jamaica—third in size amongst the West India Islands—had been discovered by Columbus in 1494, in the course of his second voyage.* Eight years later, during the course of his fourth and last expedition, Columbus had suffered shipwreck on its shores. The Spaniards colonised the island in the following year (1503), and it remained a Spanish possession for a century and a half. In 1655, Cromwell fitted out an expedition against the Spanish settlements in the West Indies (conjointly with that despatched, under Blake, for the purpose of putting down the piracies committed by the corsairs of Barbary in the Mediterranean), under the command of Penn and Venables—the former in charge of the fleet, the latter of the land-forces which it carried. The town of San Domingo, on the island of Hispaniola, was the point of attack; but the expedition failed in this, its main purpose, under circumstances somewhat discreditable to its leaders. To make amends for this want of success, the English commanders sailed thence to Jamaica, which surrendered to

* Columbus sailed from Spain, upon this occasion, on September 25, 1493. Jamaica was first seen in the month of May following, as the fleet of the Admiral steered to the southward of Cuba.

them, almost without a blow, and has ever since remained a portion of the British dominions.*

GUIANA, under which name was comprehended, in older geography, the whole vast area stretching from the Orinoco valley to the lower course of the Amazon, was the region towards which the golden dreams of Raleigh were directed, during the later portion of his career. The Spaniards had early formed settlements within that portion of the territory through which the Orinoco has its course. But the first settlers in what is now commonly known as Guiana were the Dutch, who formed plantations on the banks of the Pomaroon river, and also at the mouth of the Essequibo, as early as 1580. From the latter locality they were driven away by Spaniards and hostile Indians, but continued to maintain themselves at some points higher up the stream, as well as on the Pomaroon.

Adventurers of the English nation made several attempts at planting a colony in Guiana in 1604 and succeeding years, but without success. These attempts were renewed between 1626 and 1630, in the direction of the Surinam river, then called the Coma—that is, further to the eastward; the settlers rebuilding the Indian village of Paramaribo, which had been abandoned and destroyed by the natives. Owing, however, in part to hostile attacks from the natives, and in part to its unhealthiness, the settlement was ultimately abandoned. The French afterwards settled at Paramaribo, but relinquished it for like reasons, proceeding thence to Cayenne, and planting the settlement now known as French Guiana.

In 1652, a body of English again arrived at Paramaribo, and succeeded in establishing a settlement there. The colony prospered, and in 1662 was granted by Charles II.

* The Protector did not appreciate the importance of the acquisition which his officers had made: at any rate, he did not regard it as any compensation for the failure to execute his orders respecting San Domingo, and threw both Penn and Venables into the Tower on their return. Admiral Penn was the father of William Penn, the founder of Pennsylvania.

to Lord Willoughby, at that time governor of Barbadoes, who changed the name of Coma, by which the river was known to the Indians, to Surreyham, in honour of the Earl of Surrey. This became converted into Surinam.* The crown afterwards bought the colony from Lord Willoughby's heirs, and in 1669 exchanged it with the Dutch government for their colony of New Amsterdam, on the Hudson river (the present New York).

The Dutch, meanwhile, continued to maintain their plantations on the Essequibo, at the confluence of the Cuyuni and Massaroony with that stream. In 1613, this colony had made considerable progress, and eight years later, when the first Dutch West India Company was established, was reported to be in a flourishing condition. The culture of the land on the banks of the Berbice river was commenced in 1626. Fort Nassau, 50 miles up the river, was the capital of the Dutch colony there; near Fort Nassau was New Amsterdam. The settlements on the river Demerara (intermediate between the Berbice and the Essequibo) were a dependency on Essequibo down to 1774, when Stabroek —the present Georgetown—was made the seat of government for the united colonies of Essequibo, Demerara, and Berbice.

The settlements on these rivers remained in possession of the Dutch until 1781, when they were captured by a British squadron. They passed to the French in the succeeding year, and in 1783 were restored to the Dutch nation. A British expedition despatched from Barbadoes again took possession of them in 1796. They remained subject to British dominion until 1802, when they were again returned to the Dutch nation, to be a third time, and finally, brought under the government of Britain in the following year. Since 1803, these portions of Guiana, as far eastward as the Corentyn river, have remained under the British crown.

* A happy conversion, and one of which the euphony makes partial amends for the bad taste shown in the substitution of any name, whatever its origin, for that in native use.

SETTLEMENTS IN THE EAST.

In the latter part of the 16th century, the maritime trade with the East was almost exclusively in the hands of the Portuguese. The route to India by way of the Cape of Good Hope had been discovered by that nation towards the close of the preceding century, and the trade between western Europe and the countries bordering on the eastern seas had since continued to flow in that channel. During the later years of Queen Elizabeth's reign, the English merchants sought earnestly the means of entering upon this branch of trade. Drake had visited the East Indies in the course of his famous voyage of circumnavigation (1577–80), and had touched at the Moluccas, making some stay at the little island of Ternate, and afterwards calling at Java. In 1583, the Turkey Company, then recently established, despatched Newbury and Fitch on an overland journey to the East (by way of Syria, Bagdad, the Persian Gulf, and the island of Ormuz), in order to obtain information respecting the desired object, and the feasibility of establishing depôts of commerce. These travellers—or rather one of them, for Newbury died in India—visited Agra, Bengal, Pegu, Ceylon, and Cochin, returning home by Goa, Ormuz, and Aleppo.

First Voyage to the Indies, 1591.—This overland journey was soon followed by a maritime expedition. In 1591, a fleet of three ships, one of them under the command of Captain (afterwards Sir James) Lancaster, sailed from England for the East Indies—the first expedition of the kind undertaken by the English nation. The ship which Lancaster commanded reached its destination; and, visiting Malacca and Ceylon, obtained a cargo of pepper and other spices. On the homeward voyage, after rounding the Cape of Good Hope and obtaining some needful supplies at St. Helena, Lancaster sailed across the Atlantic to the West Indies. He encountered many storms in that region, and

was ultimately (after several disasters and delays) abandoned, with part of his crew, on the desert island of Mona, situated midway between Hispaniola and Porto Rico. He owed his release thence to a French vessel, and at length reached home, after an absence of about three years. No other profit than that which comes under the head of experience was gained by this voyage, and a second adventure of the like kind, made by the London merchants in 1596, proved still more unfortunate. But a more prosperous era was at hand.

Formation of East India Company, 1600.—Upon the last day of the 16th century (December 31, 1600), a charter was granted by the Queen to a body of merchants, under the title of "The Governor and Company of the Merchants of London trading into the East Indies," giving them exclusive privileges of trade to the East for a term of fifteen years.* The newly-established Company lost no time in commencing operations. Early in 1601 a fleet of four ships—the largest of 600 tons burden, and the whole carrying together four hundred and eighty men, sailed from England, bound for the Eastern seas. Lancaster was made admiral of the fleet, and John Davis, known as a skilful navigator, was its chief pilot.† Lancaster visited Acheen, on the island of Sumatra, and Bantam, in Java, and succeeded in opening commercial relations at both places, establishing a factory at each. He captured a Portuguese vessel which afforded a rich booty, and succeeded in bringing home to England two of his vessels laden with valuable cargoes, composed of pepper, cloves, cinnamon, and various Indian goods. The length of time which the voyage had occupied (nearly two years and a half), together with subsequent delays in the disposal of its produce, prevented the reaping any great profit from the

* The Dutch had entered into the India trade in 1595, and were already carrying it on with great success. The Dutch East India Company was formed in 1602.

† Davis had made three voyages, in 1585 and the two succeeding years, in search of the North-West passage to India. His name is commemorated in the strait which leads into Baffin's Bay.

adventure. Lancaster, however, was knighted after his return, in reward for his services. In 1604, another and similar adventure was made under the command of Sir Henry Middleton, who brought home three of his four vessels, laden with the produce of the East. Middleton's voyage occupied upwards of two years. Neither these adventures, nor several of those by which they were immediately succeeded, yielded any considerable profit to the promoters, but a single ship, commanded by Captain David Middleton, in 1611, brought home so valuable a cargo of nutmegs and mace, as to produce a dividend of above two hundred per cent.*

Meanwhile, a new charter, extending the term for which their privileges had been originally granted (but reserving to the King a right of dissolution, upon three years' notice) had been granted to the Company, in 1609. The first ventures under the new charter proved unfortunate; but several highly profitable voyages were made during the years 1610–14. In 1616, authority was obtained from the Great Mogul for the Company to establish factories at

* It was not until the later half of the 17th century that the English trade in tea originated. The first mention of tea on the part of European writers is made by the Jesuit missionaries, who visited China and Japan shortly before the middle of the 16th century. The Dutch East India Company began to import tea into Europe early in the 17th century, and the Dutch traders were the chief medium for the supply of the limited quantity required for consumption by the nations of Europe during the chief part of that period. The use of tea was only just beginning to be known in England at the time of the Restoration. In 1664, the East India Company procured, with some difficulty (and at a cost of 40s. per pound), a quantity scarcely exceeding a couple of pounds, as a rare present to King Charles II.; four years later, they had to pay at the rate of 50s. a pound for a further quantity, destined to a similar use. Their own first importation was in 1669, when they received two canisters from Bantam, in Java. After this date, their importations gradually increased. Their purchases, however, were still, for the most part, made at second-hand in Madras and Surat, they having only once gone for it direct to the port of Amoy, in China, until, in 1678, they brought home 4,173 pounds — a quantity which glutted the market for some years. It was not, in fact, until after the Revolution that the use of a beverage now held as indispensable by all classes began to grow general in England. At the present time, the annual importation of tea into Britain exceeds 70,000,000 pounds, and the cargo of a single ship sometimes exceeds a thousand tons, or upwards of 2,000,000 lbs.

Surat, Ahmedabad, Cambay, and Gogo—all on the western side of India, with the privilege of introducing their merchandise at a fixed rate of duty. Two years later, like privileges were obtained from the Emperor of Japan, and a factory was established at Firando.

It had already, ere this, become necessary for the English traders to adopt measures of protection against the Portuguese and the Dutch, both of which nations looked on them with jealousy, as intruders on a branch of traffic which they would gladly have secured to themselves. A service which the commander of an English expedition was enabled in 1614 to render the Mogul, in repelling an attack made by the Portuguese, with whom that sovereign was then on terms of hostility, tended materially to advance the interest of the English traders. Sir Thomas Roe, residing during the years 1615–19 at the court of the Mogul, as agent or ambassador for the East India Company, obtained several important privileges for his countrymen. The Company, by this time, possessed factories at numerous places in the East, amongst them Surat, Agra, Ajmere, and Burhampore, in the Mogul's own dominions; at Masulipatam on the Coromandel coast, and at Calicut on the opposite side of the Indian peninsula; at Acheen and other places, in Sumatra; at Bantam, Jacatra (now Batavia*) and Japara, in Java; at Benjarmassin, on the island of Borneo; Patan, in Malacca; at Banda, in the islands of that name; Macassar, in Celebes; at Siam; and at Firando,† in Japan.

The disputes between the English and Dutch traders in the eastern seas continued, and the home governments of the respective nations made fruitless endeavours to compose their differences. The Dutch traders sought to maintain a monopoly of the spice trade, and especially of the supply of nutmegs and cloves, which were derived exclusively from the Banda Islands. In 1619 a treaty was concluded at

* Batavia received its name from the Dutch, in 1619.

† The island of Firando lies off the N.W. coast of Kiu-siu, one of the larger members of the Japanese group.

London, in virtue of which the English and Dutch were to share in certain definite proportions in the trade of Java and the Moluccas; but in the following year the governor of the Dutch possessions forcibly expelled the English from the islands of Lantore and Pulo Roon (two of those which compose the Banda group), and the massacre of a few English resident on Amboyna, in 1623, under circumstances of atrocious cruelty, awakened on the part of the English nation a feeling of animosity against the Dutch which was of lengthened continuance. The hostilities between the rival traders operated prejudicially to the interests of the English Company. In 1622, the English, in cooperation with the Shah of Persia, had succeeded in expelling the Portuguese from the island of Ormuz,* at the entrance of the Persian Gulf, and had obtained, in reward for their services, some considerable privileges in that direction. Factories were established at Gombroon, and also at Bussorah, or Basra. But at the close of the reign of James I. the affairs of the company were in anything but a prosperous condition.

In 1641, while their trade was thus languishing, the English Company obtained one of their most important possessions — Madras, on the Coromandel coast, where they shortly built Fort St. George. In 1654, this was made the seat of a Presidency — the first in order of date of the English Presidencies in India. The exclusive privileges of the Company were virtually disregarded during several years of Cromwell's administration, and private adventurers, unhindered, chartered ships to the eastern seas; but the trade still languished, and it was not until the grant, in 1657,

* While in the hands of the Portuguese, Ormuz had been the emporium for the wealth of India. Its condition at this period is referred to by Milton (*Paradise Lost*, book ii.)

> "High on a throne of royal state, which far
> Outshone the wealth of Ormuz or of Ind."

William Baffin, the celebrated English pilot, and discoverer of the bay which bears his name, was killed at the siege of Ormuz. The island is now a barren rock, and the site formerly occupied by the town which it contained exhibits merely a mass of scattered ruins.

of a new charter to the Company that it began really to flourish. The Company relinquished their inland establishments (at Agra and elsewhere), and also those at Mocha, on the Red Sea, and Bussorah, at the head of the Persian Gulf. In 1658, the factories on the western side of India were all made subordinate to Surat, and those on the Coromandel coast and the Bay of Bengal were placed under Fort St. George, or Madras.

The island of St. Helena, which had been frequented as a place of call by homeward-bound ships since its discovery by Juan de Nova, a Portuguese navigator, in 1504, and which had been made the seat of a temporary Dutch settlement, was first taken possession of by the East India Company in 1651. The Dutch afterwards retook it, but in 1672 it was regained by the English, and was finally granted to the Company by charter in the succeeding year.

BOMBAY, 1668.—The island of Bombay (together with the fortress of Tangier, on the coast of Morocco) had been ceded to Charles II. in 1662, as part of the dowry of his Portuguese bride, Catherine of Braganza. But the local authorities evaded the transfer, and Bombay was not actually taken into English possession until 1668, when Charles granted it to the East Indian Company, on payment of a small annual rental. The Portuguese, who for some time retained possession of the adjacent islands of Salsette and Karanja, annoyed the English settlers on Bombay by frequent acts of hostility. But the trade of Bombay continued to increase, notwithstanding, and in 1687 it was raised by the Company to the rank of a Regency, and made supreme over all their establishments in India.

BENGAL, which ultimately became the chief seat of the Company's power in India, and which gives its name to the head Presidency, was that in which the English traders latest acquired a settlement. Some commercial privileges in that province were first obtained by the English factors

in 1652, through the influence of some surgeons belonging to the English nation, who had rendered important services, in the exercise of their profession, at the court of the Mogul. In 1676, the English established a factory at the town of Hooghly (on the river of that name), which had been founded by the Portuguese above a century and a quarter previously, and of which that people had been the possessors during nearly a hundred years. Hooghly was the first place in which the English acquired a footing in this part of India. In 1687, owing to disagreements with the officers of Aurungzebe, the Mogul emperor, they were forced to abandon the settlement for a brief period, of only a few months duration. The English retained subsequent possession of the town until 1756, when, together with Calcutta and the Company's other possessions in the province, it was captured by Suraja Dowlah, the soubahdar of Bengal.* Clive recaptured both Calcutta and Hooghly early in the following year.

The site of Calcutta—then including several native villages, one of which bore the name of Kallighattee (whence the word Calcutta is derived)—was granted to the English traders in 1698, in return for a present made to the Mogul sovereign. A factory had already been established, eight years previously, at the village of Chuttanuttee, immediately adjacent to Kallighattee, and comprehended, like it, within this wide-spread circuit of the modern city.† The Company proceeded to fortify their new settlements, and erected Fort William, on the left bank of the Hooghly—the name being given in compliment to the reigning sovereign of England. The settlements in Bengal were subordinate to Madras until 1707, when Calcutta was made the seat of a separate Presidency. It was not endowed with superior rank over

* This was the era of the "Black Hole" tragedy. Hooghly had been taken from the Portuguese by the forces of Shah Jehan, after an obstinate resistance, in 1632. It thence became the royal port of Bengal.

† It is said that the attention of Mr. Job Charnock, the agent of the Company, had been drawn to the spot from the welcome shade which a large tree had afforded to himself and his party, as they sojourned there for a while on their way down the river.

the other Presidencies until 1773, when Warren Hastings was appointed the first governor-general of India. From that time downwards, the Presidencies of Madras and Bombay have been subordinate to Bengal.

It had been as traders only that the English first went to the East, and their sole ambition had been to acquire the right of establishing factories in certain localities, for the purpose of carrying on their commerce. No vision of political power, however humble — still less any dream of sovereignty over the splendid empire then in existence, and since become a portion of the British dominions — dazzled the views of the founders of the "English Company of merchants trading to the Eastern Seas." India was then a great and (at least to external appearance) a powerful empire, under the sovereign rule of the Great Mogul, who held his court at Delhi. When the English Company was first established the reigning Emperor of India was Akbar, who died in 1605, and was succeeded by Jehanghir, who reigned till 1627. The latter monarch was succeeded by Shah Jehan, whose prosperous reign terminated in 1666. Aurungzebe, the successor of Shah Jehan, reigned with glory until his death, in 1707.

The authority of the Indian sovereigns, however, was comparatively weak in those provinces which were distant from the central seat of power. The vastness of the empire was a source of weakness to it. The various extensive provinces of which it was composed were ruled by viceroys (under the various titles of Soubahdar, Nizam, Nabob,* or Vizier), and these delegates were often virtually independent of the central authority. The vices of despotism, accompanied by effeminate indulgence in the worst excesses, were multiplied in a thousand forms throughout the empire. Even during the reign of Aurungzebe, seemingly so prosperous, decay had already made considerable progress, and after his death it proceeded at a speedier rate.

The employment of military force was in the first instance forced upon the English traders in India by the necessities of self-protection. A few soldiers, engaged as a garrison for each of their principal factories, long sufficed for the wants of the Company in this regard. It was not until the first half of the 18th century drew towards its close, that the English East India Company was anything more than a trading corporation. "Its territory consisted of a few square miles, for which rent was paid to the native governments.

* Properly *Nawaub*. The term nabob became subsequently applied to Anglo-Indian residents in the East, who had become possessed of wealth.

Its troops were scarcely numerous enough to man the batteries of three or four ill-constructed forts, which had been erected for the protection of the warehouses." * The jealousies of a rival nation—the French—hastened the position of hostility which the English were ultimately driven to assume. The French had first opened a trade with India about the middle of the 17th century, and Pondicherry had been established as a French settlement in 1687. The contest between the French and English for power in India commenced about sixty years later, when, on the breaking out of war between the two countries, in 1746, a French fleet sailed from Mauritius for the capture of Madras. The province of the Carnatic thus became the theatre of the first great struggle for British power in the East, and it was there that the genius of Clive—then holding the place of a writer in the Company's factory at Fort St. David, in the neighbourhood of Madras—was first displayed. Clive's earliest exploits were the capture, and subsequent defence, of Arcot (1751). Bengal shortly became the theatre of active warfare. The nabob of that province had dispossessed the English of Hooghly and Calcutta, and committed to the "Black Hole" the unfortunate prisoners who fell into his hands. This was in 1756. The battle of Plassey, fought by Clive in the summer of the following year (June 20, 1757), was the first great step towards the acquisition of British power throughout the vast continent of India.

* Macaulay: Essay on Lord Clive.

CHAPTER XII.

BATTLE-FIELDS OF THE CIVIL WAR (1642—1651).

THE period of English history which comprehends the years 1642—1651 is one that requires the Map to be constantly spread before the student, if he would follow correctly the narrative of events. The contest between the King and the Parliament — the most important and memorable struggle which belongs to the annals of England — found its final issue in an appeal to arms, and nearly every part of the island became, in the course of the great civil war, the scene of active conflict, either on the open field of battle, or in connection with the numerous towns and fortified strongholds which were attacked by the forces of a besieger.

The following list includes the more important battles and skirmishes in the open field which belong to the period now under consideration:—

Edge Hill	1642,	Oct. 23	Winceby (Horncastle)	1643,	Oct. 11
Brentford	„	Nov. 12	Alton	„	Dec. 1
Tadcaster	„	Dec.	Nantwich	1644,	Jan. 25
Bradock Down	1643,	Jan.	Alresford	„	March 29
Hopton Heath	„	March	Selby	„	April 11
Grantham	„	May 13	Cropredy Bridge	„	June 29
Stratton	„	May 16	Marston Moor	„	July 2
Wakefield	„	May 21	Newbury (2nd)	„	Oct. 27
Chalgrove	„	June 18	Islip Bridge	1645,	April 24
Atherton Moor	„	June 30	Naseby	„	June 14
Lansdown	„	July 5	Langport	„	July 10
Roundway Down	„	July 13	Rowton Heath	„	Sept. 24
Gainsborough	„	July 31	Sherburn	„	Oct.
Newbury (1st)	„	Sept. 20			

Torrington	1646, Feb. 19	Kingston	1648, July 5
Stow	„ March 22	Preston	„ Aug. 17
St. Fagans	1648, May 8	Dunbar	1650, Sept. 3
Maidstone	„ June 1	Worcester	1651, Sept. 3

In the brief notices which follow, the chronological sequence is in a few instances departed from, in order to make some approach to harmony in the topographical arrangement, and thereby avoid the inconvenience involved in the rapid transition from one part of the Map to another.

EDGEHILL.—The Edge Hills, which give their name to the first conflict of any importance that belongs to this unhappy period, are a rising ground situated on the border line between the counties of Oxford and Warwick, lying along the south-eastern edge of the latter.* The range of high ground of which they form part exhibits a gentle and undulating slope, rising with gradual ascent above the valley of the Warwickshire Avon, and forming a watershed between the affluents of that river and the streams that flow in an eastwardly direction towards the basin of the Cherwell. Their extreme elevation above the sea is less than nine hundred feet. The plain at their western base bore formerly the name of the Vale of the Red Horse: it was here that the battle was chiefly fought.

The King had raised his standard at Nottingham, on August 25, and, after some delay, had marched westward towards Stafford and Shrewsbury. Leaving the latter place on October 20, he began to advance towards the metropolis. The Earl of Essex, who commanded the army of the Parliament (stationed in the neighbourhood of Northampton at the time that the royal standard was first raised), after securing the towns of Coventry and Warwick, had taken possession of the city of Worcester, where he remained inactive for three weeks. When the King began to move from Shrewsbury, he was in advance of Essex's army, which however followed closely on his rear, and on the evening of October 22, as the

* See *ante*, p. 31.

Royalists halted at Edgehill, the Parliamentary army entered the little town of Kineton, in Warwickshire, only three miles distant. On the following day (Sunday, October 23) the battle was fought, the contest commencing about 2 o'clock in the afternoon.

The Parliamentary army occupied the plain at the foot of the hills, then known as the Vale of the Red Horse. The Royalists occupied the rising ground above. The King was on the field in person. The conflict was indecisive in result, but the Parliamentarians remained in possession of the field of battle. The Royalists rested during the ensuing night on the high grounds above, but commenced a rapid retreat on the following morning.

BRENTFORD, MIDDLESEX.— A skirmish in the neighbourhood of Brentford occurred during the progress of negotiations for an accommodation between the opposing parties, about three weeks after the date of the battle of Edgehill.

Brentford, a well-known market town, is situated on the north bank of the river Thames, on the line of the great western road from the metropolis, and at the point where the little stream of the Brent joins the Thames. It is from its position in reference to the former stream that the name of the town, which is of early origin, is derived.* Acton is between two and three miles to the north-eastward of Brentford.

While the King himself, after the fight at Edgehill, made a brief stay at Oxford, his army, under Prince Rupert, advanced towards London. The citizens, alarmed at his near approach, dug trenches and threw up ramparts round the metropolis. The Parliamentary leader, Essex, at length reached the neighbourhood of the capital, and quartered his army about Acton. While the negotiations between the opposing parties were going on, an advanced detachment of the Royal army, headed by Prince Rupert, and followed by the main body of the Royal forces, under the King in person, attacked unexpectedly, and under cover of a dense November fog, a detachment of the Parliamentary forces stationed at Brentford. The troops of the Parliament — a regiment commanded by Colonel Hollis — made so stout a resistance as to give time for other detachments of their

* There was, however, a bridge over the Brent as early as the reign of Edward I., who granted a toll for its support. A battle was fought at Brentford in 1016, when the Danes were defeated with great slaughter by Edmund Ironsides, who had pursued them thither from London.

army (under Hampden and Lord Brooke) to come to their aid, and completely barred any advance on the part of the King's army, which then gave up the attack. This was on the evening of November 12. All that night and the next day, bands of Londoners poured out towards Brentford, and by the morning of Sunday the 14th the Parliamentary General found himself at the head of an army of 24,000 men, drawn up in battle array upon Turnham Green. A battle between the opposing armies was imminent, but the opinions of Hampden and others who urged the attack of the Royalist forces were over-ruled, and the King was allowed to retreat across the Thames, to Kingston, in Surrey. The winter prevented any renewal of active operations for a season.

BRADOCK DOWN.—An engagement which took place upon Bradock Down, in the neighbourhood of Liskeard, Cornwall, about the middle of January, 1643, was the earliest in date of numerous contests in the west of England during the civil war. Bradock (or Broad Oak) Down is about five miles W. by S. of Liskeard. It belongs to the extensive tract of elevated down and moorland which stretches through the length of Cornwall, and fills up the whole interior of the county.

When the civil war was on the point of breaking out, the train-bands of Cornwall, raised at the instance of the high sheriff of the county, had rendered important service to the Royal cause, in the dispersion of riotous assemblages of persons disaffected to the government. But their conditions of service forbade the pursuit of their advantage beyond the bounds of their own county, and the adherents of the Parliament possessed great strength in the adjoining county of Devon. Sir Ralph Hopton and others of the Cornish gentry thereupon raised a considerable force of horse and foot at their own expense, and commissions for the employment of these troops were granted by the King.

The county of Cornwall was by these means secured to the Royal cause, and during the early part of the winter of 1642–3 the Cornishmen made incursions into the adjacent county, even to the walls of Plymouth and Exeter — both of which places were held for the Parliament. In January 1643, a body of Parliamentary forces, gathered in the western counties, and placed under the command of Ruthen (a Scotchman), advanced into Cornwall, crossing the Tamar by a bridge thrown over the river six miles above Saltash. The

Royalists were by this sudden invasion compelled to retire to Bodmin, while the Parliamentary leader advanced as far as Liskeard, within seven miles of that place. Both parties were desirous of a speedy encounter in the open field. Ruthen chose his ground upon the east side of Bradock Down. The Royalist forces, under Sir Ralph Hopton, after a brief contest, beat their opponents off the ground, and put them to a complete rout, pursuing them as far as Saltash.*

STRATTON. — This locality, like that last mentioned, belongs to the south-western corner of England. Stratton is a small market town in the extreme north of Cornwall, about two miles distant from the sea, and three miles from the right bank of the river Tamar — there a stream of slender proportions.

In the west, as elsewhere, a cessation of hostilities had occurred while the abortive proposals for accommodation were passing between the King and the Parliament, in the spring of 1643. But the partisans of either side remained in arms after the encounter near Liskeard, and as the winter drew towards its close several trifling skirmishes, attended with varying results, took place in Cornwall, chiefly along or near the Devonshire border.

Towards the middle of May, the Earl of Stamford marched into Cornwall, by the north part, with a body of 1,400 horse and dragoons, and 5,400 foot, bringing with him a train of ordnance, and a plentiful supply of victual and ammunition. The King's forces, fewer in number, and insufficiently supplied with provisions and other necessaries, were quartered at Launceston. The Earl's followers chose for their place of encampment the flat ground forming the top of a high hill, with steep ascents on every side, in the vicinity of Stratton — "the only part of Cornwall (says Clarendon) eminently disaffected to the King's service." Thence they sent nearly the whole body of their horse and dragoons to Bodmin, with a view to surprise the high sheriff and other gentlemen of the county, and so prevent any accession of strength to the Royalist forces in that part of the kingdom. This proceeding proved fatal to their own cause. The Royalist leaders determined on the bold measure of assaulting the Parliamentary camp, in the absence of its horse, and in doing so gained a brilliant success.†

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* Clarendon: History of the Rebellion, book vi.

† The contest began about 5 in the morning (May 16), the assailing force having stood in their arms all the preceding night. The Royalists

LANSDOWN, near Bath.— Lansdown lies immediately north of the city of Bath, in the north-eastern angle of Somersetshire. It forms the southward termination of the oolitic range of the Cotswold hills, which stretch along the eastern side of the Severn valley, through the whole length of the county of Gloucester, finally sinking, with a rapid slope, towards the north bank of the river Avon, immediately below Bath.* The surface of Lansdown, like that of the Cotswold range throughout, forms a kind of undulating plateau-region, intersected by depressions or valleys. Its highest point is 813 feet above the level of the sea. It was on this tract of upland that a prolonged engagement, attended with no decisive advantage to either side, took place between the contending armies of the King and the Parliament, on July 5th, 1643.

Sir William Waller, then the favourite General of the Parliament, was stationed at Bath in the early part of the summer of 1643. The broken remains of the Parliamentary troops defeated at Stratton, with various bands raised in the counties of Devon and Somerset, had joined their numbers to the body of forces which he commanded — not, however, without the occurrence of several sharp skirmishes as they advanced through the last-named county, to-

charged in four divisions, up the respective sides of the hill upon which the Parliamentarians were stationed, a body of reserve being posted near at hand. "In this manner (says Clarendon) the fight began; the King's forces pressing, with their utmost vigour, those four ways up the hill, and the enemy's as obstinately defending their ground." The contest continued, with very doubtful success, till about 3 in the afternoon, when word was brought to the chief officers of the assailing force that their ammunition was almost consumed. Concealing the knowledge of this from their followers, the Royalist officers determined to advance, sword in hand, without any further expenditure of ammunition until they should have reached the summit of the hill, and thus be on a level with the enemy. Seconded bravely by their men, they continued to force their way upward, in spite of a gallant resistance on the part of the foe, whose leader (Major-General Chudleigh) was taken prisoner, and at length the four columns of the assailing party met upon one ground near the top of the hill. There they became masters of some of the enemy's cannon, by means of which the victory was made complete, the Parliamentary troops dispersing in all directions. Above three hundred of the Parliamentarians fell in the struggle, and seventeen hundred were made prisoners. The loss of the Royalists was inconsiderable. The victors rested that night and the next day at Stratton.— *Clarendon*, book vii.

* See *ante*, p. 31.

wards Bath, closely followed by a considerable body of the King's forces, under Prince Maurice, the Earl of Caernarvon, and other noted leaders. The Royalist forces, after resting several days at Wells, advanced to Frome, and thence to Bradford, within four miles of Waller's quarters at Bath. Several skirmishes ensued, with various successes, and almost equal losses on either side. But the Royalists desired to bring about a general action, since they experienced the difficulty of maintaining themselves in a country disaffected to their cause, while the army of Waller had the advantage of being quartered in a good city, abundantly supplied with provisions. After some fruitless efforts to draw the enemy away from his advantage of ground, they at length advanced, with their whole force, to Marshfield, a small town lying five miles distant from Bath, to the north-eastward, as though their intention had been to march towards Oxford, where the King then was, and so unite their forces to his. As they anticipated, the Parliamentary General determined to make an effort to hinder this junction: leaving Bath in his rear, Waller drew out his whole army to Lansdown, and engaged the Royalist forces.

The Parliamentary leader possessed himself of Lansdown Hill on the morning of July 5, as soon as it was light, and raised breastworks there, planting them with cannon. His followers had therefore the advantage of ground, his horse and dragoons charging down the hill, upon the Royalist forces. The latter behaved gallantly, and regained the ground from which the first charge had driven them. The action lasted, with various alternations of fortune, the whole day, but at its close the Royalists had driven their enemy from his ground, and their whole remaining body, horse, foot, and cannon, rested on the summit of the hill; the opposing forces retired in good order from the field, and during the night found a safe shelter in the city of Bath.*

ROUNDWAY DOWN. — The engagement which took place upon Roundway Down, eight days after the action of Lansdown, was a sequel to that contest. In it, a brilliant and decisive success was achieved by the Royalist arms. Roundway Down is an eminence near the town of Devizes, in Wiltshire. The town itself stands upon somewhat elevated

* Clarendon, book vii. The numbers who had fallen were about equal upon either side. Of the King's horse, out of two thousand that were upon the field in the morning, not above six hundred were at the close of the day seen upon the hill-top.

ground, in the centre of the county, and nearly adjacent to the line of watershed between the respective basins of the Salisbury and Bristol Avons. It is overlooked, however, by higher elevations on every side but the east. Roundway Down, one of the most conspicuous of these neighbouring heights, is about a mile and a half distant from the town, in the direction of north by east.

After the action of Lansdown, the Royalist troops had determined to join the King at Oxford, and set out on their march thither, by the road from Marshfield, through Chippenham. The Parliamentary General, with his forces recruited from the adjacent district, marched from Bath in the same direction, and came up with them at or near Chippenham, where the Royalist commanders offered to give him battle. But Waller disliked the ground, as not being well suited for the action of his horse. The Royalists thereupon advanced along the road towards Devizes, into which place (with some skirmishing on the way between their own rear and the advanced parties of the enemy) they succeeded in throwing themselves. The force of Waller, considerably augmented from the surrounding district, on every side completely hemmed in the Royalists, and the Parliamentary General seems to have made sure of their speedy surrender.

But the Royalist leaders adopted a bold measure. The Marquis of Hertford and Prince Maurice, leaving their infantry in the town, but accompanied by all their horse, succeeded, under cover of night, in passing beyond reach of the Parliamentary army, and rode to Oxford, which was little more than forty miles off, and where the King then lay. Meanwhile Waller drew his forces closely round Devizes, which was open, without any fortification or defence, and barred every avenue from it. Then, planting a battery on a neighbouring hill, he poured in shot, but was repulsed in every effort which he made to enter it. The valour of the besieged Royalists prolonged the defence of the place, and gave time for the movements of their leaders. Directly the Marquis and Prince Maurice had reached Oxford, it was determined to despatch a body of fifteen hundred horse, under Lord Wilmot, to the relief of the beleaguered town. This was on the Monday morning, and on the following Wednesday about noon Wilmot appeared, with his horse, upon the plain within two miles of Devizes. Prince Maurice had returned with him, but only as a volunteer, leaving the sole command to Wilmot. The Parliamentary General, on finding this fresh enemy close at hand, drew out his forces upon Roundway Down, which lay between

the town and the troops under Wilmot, and there the battle took place.*

CHALGROVE.— The skirmish upon Chalgrove field preceded by a few weeks the battles of Lansdown and Roundway Down.† It was at Chalgrove that John Hampden received his death-wound. This circumstance alone gives importance to the skirmish which occurred there, on the morning of Sunday the 18th of June, 1643. The spot where Hampden shed his life-blood in the cause of his country's freedom should be classic ground to Englishmen of the latest generation.

Chalgrove is a village in Oxfordshire, lying nearly ten miles distant from the city of Oxford, in a direction of south-east. The road thither from Oxford crosses the river Thame at Chiselhampton. Between three and four miles beyond Chalgrove, in the same direction, is the little town of Watlington, lying close to the western foot of the Chiltern Hills. The town of Thame, on the immediate border of the county (and divided from Buckinghamshire by the stream of the Thame, after that river has watered the fertile vale of Aylesbury), is distant a little more than seven miles in the direction of N.E. from Chalgrove, and nine miles from the village of Chiselhampton, on the Thame. It is necessary to note these localities carefully on the Map, in order to understand the circumstances under which the encounter at Chalgrove took place.

In the month of June, 1643, the King was stationed at Oxford. The head-quarters of the Parliamentary army, under the Earl of Essex, were at Thame. Prince Rupert, receiving intelligence from Colonel Urrey, a deserter from the Parliamentary side, that two

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* Waller was confident of victory, and paid the usual penalty of overweening assurance. His horse, though bravely led and fighting bravely, were broken in the first charge. The foot stood firm for a time, but were obliged to give way when the Royalists, becoming masters of their enemies' cannon, turned their own guns upon them. A complete rout of the defeated Parliamentarians ensued. Waller, with a small train of followers, escaped into Bristol, carrying the news of his own disaster.— *Clarendon*, book viii.

† See list, in p. 231.

outlying regiments of the Earl's forces, quartered at Wycombe, lay in such a manner as to expose them to attack, determined to beat up the Parliamentary quarters. His troopers were called together, by sound of trumpet, on the afternoon of Saturday, June 17, and issued from the streets of Oxford by Magdalen Bridge. They numbered two thousand men. Rupert advanced along the road towards Wycombe, crossing the Thame by Chiselhampton Bridge,* and thence proceeding, under cover of the summer night, towards the woodland tract of country within which the villages of Stokenchurch, Chinnor, and Lewknor, with the neighbouring hamlet of Postcombe, are situated. To the northward of this line of march, and but a short distance off, lay Thame, the head-quarters of the Parliamentary General: to the southward, equally near, was Watlington, where Hampden (who had but the day before vainly urged the Earl of Essex to strengthen his line by calling in his detached and outlying picquets) had slept on the night of Rupert's sudden march. As the Prince proceeded on his returning march to Oxford, laden with prisoners and booty, Hampden determined to intercept him, and joined (as a volunteer, for his own regiment consisted of foot) a troop of horse belonging to Captain Sheffield, together with some of the dragoons of Major Gunter's regiment, for the purpose. He had already, on receiving intelligence of Rupert's night-march, despatched a messenger to Essex, urging the importance of his sending a detachment to intercept the returning Royalists at Chiselhampton Bridge, where they must necessarily recross the river Thame. But the advice of Hampden was disregarded by the tardy Essex, and the soldiers of the Parliament looked in vain for the expected column of Essex's force while they charged the advancing squadron of Rupert, whose advance they sought to delay, in order to give time for the movement which Hampden had recommended. A sharp encounter took place upon Chalgrove Field, among the standing corn. The Par-

* The details of Rupert's unexpected movement, derived from a contemporary source, are given in Lord Nugent's "Memorials of Hampden" (London, 1832); also, less fully, in the Pict. Hist. of England, and elsewhere. But the looseness with which the facts of topography are too often treated is strikingly shown in the circumstance that all the narrations describe the Prince as having crossed the *Cherwell* at Chiselhampton Bridge. Chiselhampton, as any correct Map will show, is on the Thame, and is six miles distant from the nearest point of the Cherwell.

The tract of country within which Rupert's sudden raid had been executed was one well known to Hampden, and near which great part of his life had been passed. It is intersected (says the author of the "Memorials"), in the upper parts, with woods and deep chalky hollows, and in the vales, with brooks and green lanes.

liamentary troop of horse was thrown into some confusion, and their commander, Major Gunter, was slain. Hampden rode up to support and rally the disordered troop, and, putting himself at the head of a squadron, charged Rupert's right. While spurring up to the Royalists, he was struck in the shoulder by two carbine balls. The reins fell from his disabled arm, and, with his body bending in pain over his horse's neck, he was seen to ride off the field. The troops of his party fell into disorder, and the Prince got safely back to Oxford with his booty.*

TADCASTER, YORKSHIRE.—Tadcaster, a small and well-built town in the West Riding of Yorkshire, lies within the fertile valley of the Wharfe, chiefly upon the south bank of the river, and nine miles S.W. of the city of York. It is a place of ancient origin, and represents the *Calcaria* of the Roman Itineraries. A sharp engagement occurred, close beside the town, soon after the outbreak of the Civil War, early in the December of 1642. This was first in point of numerous contests in the field that took place in the north of England during that unhappy period.

Lord Fairfax, who had been appointed to the chief command of the forces levied by the Parliament in the northern counties, had fixed his head-quarters at Tadcaster. He was attacked there by the Earl of Newcastle, who commanded the King's levies. The fight began about 11 o'clock in the morning, and lasted until 4 in the evening, with somewhat indecisive results. In the end, the Royalists retired from the town, which, however, the Parliamentarians abandoned a day or two after, falling back upon Selby and Cawood.†

HOPTON HEATH, NEAR STAFFORD.—Hopton Heath is an open tract of ground in the central part of Staffordshire,

* Hampden reached the General's quarters at Thame, where, after six days of intense suffering, he breathed his last. He was buried, a few days later, in the parish church of Hampden (a village lying about three miles to the east of the town of Princes Risborough, and twice that distance to the northward of Wycombe) in Buckinghamshire.

† Rushworth: Historical Collections, part III. vol. ii. p. 91.—A battle had been fought on Bramham Moor, near Tadcaster, above two centuries before (in 1408), during the reign of Henry IV., on which occasion a body of insurgents under the Earl of Northumberland were defeated by the Sheriff of Yorkshire, Sir Thomas Rokeby, the Earl himself being slain in the fight.

midway between the rivers Trent and Sow, and about two miles distant from the town of Stafford, to the north-eastward. A sharp but indecisive conflict took place here upon a Sunday afternoon, about the middle of March, 1643.

The town of Stafford was at the time held by the Royalists. The Parliamentary cause was, however, generally predominant in that part of the kingdom. A Parliamentary force had just succeeded in reducing Lichfield, and its leader proceeded thence to besiege the Royalists in Stafford. The Earl of Northampton, with a body of Royalist troops, threw himself into the town. The Parliamentary General, Sir John Gell, retiring for a while on the Earl's advance, strengthened his forces by junction with a body of troops under the command of Sir William Brereton, who commanded the Parliamentary garrison at Nantwich, an important station. He then moved back towards Stafford, in expectation that the Earl of Northampton would encounter him without the walls of the town, as proved to be the case. The contest took place on Hopton Heath (or Salt Heath, as it was also called). After nightfall, the ground was found too full of coal-pits and dangerous holes for the Royalists to pursue the advantage they appear to have gained, and when morning dawned their foe had disappeared.*

GRANTHAM. — The market town of Grantham, in Lincolnshire, is a well-known locality. It stands in the south-western part of the county, beside the right bank of the river Witham, about 13 miles below the source of that stream, and 22 miles distant, in the direction of S. by W., from the city of Lincoln. The line of the ancient Ermine Street, a Roman road, passes a short distance to the eastward of the town. Newark-upon-Trent, in the neighbouring shire of Nottingham, is 13 miles N.W. of Grantham. No vestige of tradition indicates the precise locality of the sharp skirmish which took place in the vicinity of Grantham, between the Royalists and Parliamentarians (the latter under the command of Cromwell), on the

* The Royalist leader was killed on the field—a loss to his party (says Clarendon) which more than counterbalanced the advantages in other respects gained by his followers. See *Clarendon*, book vi. Also Rushworth, part III. vol. ii. p. 152.

evening of May 13, 1643, but it must have been about two miles out of the town, on the Newark road.*

WAKEFIELD. — The town of Wakefield stands on the left bank of the river Calder, in the West Riding of Yorkshire, 25 miles S.W. of the city of York. It has been already noticed in connection with an important battle fought in its vicinity, during the Wars of the Roses.† An action which took place there on the 21st May, 1643, and in which a decisive advantage was gained on the side of the Parliament, was fought close beside the town, which afterwards surrendered to the Parliamentary General.

The action at Wakefield was one of the many services rendered by the Fairfaxes to the Parliamentary cause. The Royalist forces, consisting of seven troops of horse and six foot regiments, were in possession of the town, when it was attacked by the Parliamentarians. The town surrendered, and with it General Goring, the Royalist leader, and 1,500 prisoners.‡

ATHERTON MOOR, LANCASHIRE. — This locality is with difficulty recognised on the modern maps. Atherton is in the present day a populous manufacturing village (or chapelry) situated about two miles N.N.E. of the town of Leigh, in the southern division of Lancashire. It lies about 10 miles distant, in the direction of N.N.W., from Manchester, and less than half that distance to the south-westward of Bolton. The present industry of the district is almost

* Carlyle: Letters and Speeches of Oliver Cromwell, vol. i. p. 119. This was the first important occasion on which the services of Cromwell were conspicuously displayed upon the field of battle. He had for some time commanded a formidable body of horse, serving in the eastern counties, in connection with the association formed there on behalf of the Parliament. Cromwell had unsuccessfully assaulted the town of Newark, occupied by a considerable Royalist garrison. It was immediately after this attempt that the fight near Grantham took place. Grantham was also held by the Royalists. The King's troops came out of the town, numbering one and twenty colours of horse, and three or four of dragoons. Cromwell's men were only twelve troops, but their valour and discipline enabled them to achieve a brilliant victory.

† See *ante*, p. 171.

‡ Rushworth: Historical Collections, part III. vol. ii.

exclusively devoted to the cotton-manufacture: coal-pits and factories are the chief objects that chiefly meet the eye of the observer, as he scans the surface of the surrounding moors.

The moors about Atherton were the scene of a severe defeat sustained by the Parliamentary forces, under Lord Fairfax, at the hands of the Royalists, commanded by the Earl of Newcastle, upon the last day of June, 1643.*

GAINSBOROUGH.—The town of Gainsborough, in Lincolnshire, stands on the right bank of the river Trent, which there divides the counties of Lincoln and Nottingham. It is a place of early origin, and was of considerable importance as a port in Saxon times, the Trent being navigable for ships of considerable tonnage up to the town.†

The vicinity of Gainsborough was the scene of an important skirmish between the Parliamentary troops, under Cromwell, and a body of Royalists, headed by General Cavendish (cousin of the Earl of Newcastle), on the last day of July, 1643. The action was fought about two miles south of the town, on the road to North Scarle, "upon an expanse of upland, of no great height, but sandy, covered with furze, and full of rabbit-holes."‡

* This result formed a striking exception to the general career of good fortune which attended the Parliamentary cause in the north of England.

† It was at Gainsborough that the Danish king, Sweyn, died suddenly (stabbed, some writers say, by an unknown hand) when on the point of re-embarking with his fleet, anchored in the neighbouring river. The site of the Roman *Segelocum* is at Littleborough, also on the Trent, four miles south of Gainsborough, and on the direct line of Roman road between *Lindum* (Lincoln) and *Danum* (Doncaster).

‡ The ground is now much altered, but a lasting memorial of the fight is found in the names of Redcoats Field and Graves Field, which, with that of Cavendish's Bog, are still preserved. (Carlyle: Letters and Speeches of Oliver Cromwell.)

Gainsborough was besieged by the Royalists. Cromwell sought to raise the siege. He had just taken by assault Burleigh House, in Rutlandshire (near Oakham), and thence, marching through Grantham, and by way of North Scarle—a village lying 14 miles S. of Gainsborough, and just within the Lincolnshire border—advanced towards Gainsborough for the purpose. The Royalist General, Cavendish, was slain in the action that ensued. Cromwell, however, was obliged to retire before the superior force of the Earl of Newcastle, and Gainsborough fell a few days later into the hands of the Royalists.

WINCEBY (HORNCASTLE). — Winceby, a small upland village, easily recognised on the map of Lincolnshire, is situated on the Wolds, between four and five miles eastward of the town of Horncastle. The last-named place lies 17 miles distant from the city of Lincoln, in the direction of E. by S. An action of considerable importance took place at Winceby, upon October 11, 1643, in which the Parliamentary forces, led by Cromwell, and seconded by Sir Thomas Fairfax, gained a brilliant victory.*

NEWBURY. — Two important battles, with an interval of rather more than a year between their dates, took place in the immediate neighbourhood of Newbury, during the Civil War. The earlier of the two, September 20, 1643, was fought within less than a mile of the town, upon its western side.

Newbury, a town of ancient origin,† is situated on the right or southern bank of the river Kennet, in the county of Berks. It chiefly derives importance, in the present day, from its extensive market for corn and other agricultural produce. The manufacture of woollen goods which it once possessed has long ceased to exist.

* Horncastle itself lies at the western foot of the Lincolnshire Wolds. In the Letters and Speeches of Oliver Cromwell (vol. i., p. 142), Winceby is wrongly described as being to the *west*, instead of the *east*, of Horncastle. "The confused memory of this fight," says Mr. Carlyle, "is still fresh there: the lane along which the chase went bears ever since the name of Slash Lane."

The fight at Winceby was one of Cromwell's most brilliant exploits in the field. Cromwell was in imminent personal danger. His horse was killed under him at the first charge, and fell upon his rider: as he rose from the ground, he was knocked down by a blow from one of the enemy, but "recovered a poor horse in a soldier's hands, and bravely mounted himself again." The contest was short and decisive. The Royalist troops, unable to resist the charge of Cromwell's dragoons, were driven back upon their own body, and threw them into disorder: the enemy was routed in less than half an hour. The pursuit was continued to the town of Horncastle or beyond, and above a hundred of the Royalists were found drowned in the ditches and quagmires by the way.

† The site of the Roman station of *Spinæ*, on the opposite side of the river, is closely adjacent. From this proximity, the name of Newbury (i.e. New-byrig, or borough) is supposed to have originated.

The occasion of the first battle of Newbury was the return march of the Parliamentary General, the Earl of Essex, to London, after his relief of Gloucester, during the time of its siege by the King. Essex, advancing from the metropolis, had succeeded in throwing supplies into the besieged city, and, after a stay of three days, set out on his return. At the beginning of this return march, Essex was in advance of the King's forces. But the Royalist horse, under Rupert, harassed his rear, and gained some advantage in the course of his passage through the enclosed parts of Wiltshire. The Earl took up his quarters, during a brief delay, at Hungerford. Meanwhile the King's main body of foot, with his train, hastening up, joined the horse under Rupert, and got in advance of the Parliamentary General, so that when the Earl advanced from Hungerford, on the road to Newbury, he found, upon getting within two miles of that town, that it was in possession of the Royalist army. It was necessary for the Earl to dislodge the King's forces, in order that he might continue his march. The contest lasted a whole day, without decisive advantage on either side. The King's army drew off during the night, and the Parliamentary General was able to enter Newbury, unmolested, on the following morning, thence to pursue his march towards London.*

The second battle of Newbury occurred on Sunday, October 27, 1644, and was the last important action belonging to the campaign of that year. The operations of the battle, with those of the desultory skirmishing which had occurred during the two preceding days, ranged over a considerable tract of ground, lying immediately to the north of the town of Newbury, between the village of Shaw, to the eastward, and that of Speen, in a westerly direction.

The opposing armies were for the second time brought into conflict at Newbury in the course of the King's return march from the west of England to his winter quarters at Oxford.† The King, with

* The battle of Newbury was the last contest of any importance in the open field during the year 1643. It was in this first battle of Newbury that Lord Falkland was killed. The firm stand made by the Parliamentary foot — consisting principally of the London train-bands, composed of apprentices, artizans, and shop-keepers — saved their cause. Rupert's horse found it impossible to make any impression upon the immovable barrier which these pikes presented. Clarendon: book vii. Also Hume, chap. lvi.

† After the important advantage gained over the Parliamentary General, Essex, who had allowed himself to be cooped up in a corner of

the chief part of his army, was quartered in Newbury, when the Parliamentary forces, consisting of the combined divisions of Waller and Middleton, with the troops of Manchester and Cromwell, drawn for the purpose from the eastern counties, and under the supreme command of the Earl of Manchester, resolved to attack him there. The action lasted the whole day, without any decisive issue. During the night, the King drew off his forces, leaving his enemies in possession of the ground, and of the town of Newbury. The Royalist ammunition and baggage were first removed to Donnington Castle, in the neighbourhood — about a mile and a half to the N.W. of Newbury, and beside the little stream of the Lambourne, which joins the Kennet below Newbury.* The King's troops then took the road towards Wallingford.

Twelve days after the battle, the Royalist army, reinforced by the junction of several fresh detachments, returned to the neighbourhood of Newbury, and were suffered, unmolested, to withdraw the ammunition which they had left at Donnington on the night of the engagement.

ALTON. — The town (or "great village" as Clarendon styles it) of Alton is situated in the eastern part of Hampshire, near the source of the river Wey, and amongst the picturesque chalk hills which belong to that district of England. It was the scene, early in the winter of 1643-4, of a sharp action, in which the Parliamentary General, Waller, surprised and routed a body of Royalist troops who were quartered there. The engagement took place on the hill behind the present national school of the town, and the door of the parish church, in which some of the defeated troops took refuge, still bears marks of the shots of the assailants.†

The head-quarters of the Parliamentary General were at Farnham, in the neighbouring county of Surrey, when, learning that a detachment of the Royalist troops, belonging to the forces commanded by

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Cornwall, in the neighbourhood of the town of Lostwithiel, between the river Fowey and the sea, where his foot had been compelled to surrender at discretion — the horse cutting their way through the enemy under cover of a fog, while Essex himself escaped by sea to Plymouth.

* Donnington Castle had been for some time unsuccessfully besieged by the Parliamentarians, who had raised the siege on the King's approach.

† Art. Alton: Imperial Cyclopædia of Geography.

Lord Hopton, who was then quartered at Winchester, lay in fancied security at Alton, he surprised them by a sudden night march. The Royalist horse, on alarm of Waller's approach, made a timely retreat to Winchester; but a regiment of foot, five hundred strong, were compelled to surrender, after a stout resistance.*

ALRESFORD. — The town of Alresford — a place which was formerly of more consideration than belongs to it in the present day — is situated on the stream of the Itchen, not far below its source, and between six and seven miles to the E. by N. of Winchester. An action was fought in its neighbourhood, between Alresford and the village of Cherington or Cheriton (situated two miles S. of the town, on the road to Bishop's Waltham), early in the spring of 1644. The Parliamentary General gained, on this occasion, another advantage over the Royalist forces.

The head-quarters of Waller were still at Farnham, and those of Lord Hopton, the Royalist commander, at Winchester. The latter was desirous of retrieving the loss sustained at Alton. Both generals advancing, their respective forces met at Alresford. As evening approached, the Royalists withdrew from the field.†

CROPREDY BRIDGE. — Cropredy is a village in the extreme north of Oxfordshire, situated on the left bank of the river Cherwell, about four miles N. of Banbury. A bridge over the Cherwell connects Cropredy with the meadows on the east bank of the river; in these meadows a sharp encounter took place on the morning of June 29, 1644, between the King's troops and the Parliamentary army under Waller, the Royalists gaining some advantage over their opponents.

The fight at Cropredy Bridge can only be understood by reference to the movements made during the few weeks immediately preceding its occurrence. At the end of May 1644, the King lay at Oxford (where he had passed the winter) exposed to imminent peril of being shut in between the two armies of the Parliament, under

* Clarendon: bk. viii.
† Clarendon: bk. viii.—Hume (chap. lxvii.) refers to this contest under the name of Cherington.

the respective command of the Earl of Essex and Sir William Waller, then making close approach to the city from opposite sides. Essex, from the eastward, threatened to pass the Cherwell, while Waller's forces were close to the right bank of the Isis, only a few miles above the city. The King adopted the resolution of stealing out of Oxford, on the night of June 3, with a part of such forces as he then possessed (leaving the remainder of his army to defend the city, in case of siege), and marched to the north-westward, towards Evesham and Worcester. A feigned movement, made in an opposite direction, deceived the Parliamentary Generals as to his intention. Both Essex and Waller had advanced some distance in pursuit, when the former, finding the King already too far ahead, abandoned the further pursuit to Waller, resolving himself to advance into the west of England, in order to relieve the town of Lyme Regis (where Blake had for some time been making heroic defence against Prince Maurice and his Royalist followers), and to reduce that part of the country in general.

Then followed a close pursuit by Waller of the retreating King, who advanced to Worcester, and stayed there some days. From Worcester the King made a feigned movement northward, by which he deceived Waller into the belief that he meant to pursue his course to Shrewsbury, with a view to joining the Royalist army in the north. The artifice led Waller to advance with all speed northward in the direction which he imagined the King intended to take, while the unhappy monarch — glad to have eluded his pursuer for a time —hastened southward again (by way of Evesham, where he broke the bridge over the Avon, leaving that river between himself and his foes) towards Oxford, in order to unite his forces to the rest of his army, which he directed to meet him at Witney. This junction was effected, and on June 20, within seventeen days of his leaving Oxford under such unpropitious circumstances, the King was again at the head of a respectable force, and in a condition to meet, instead of avoiding, a hostile army.

The Royal army now consisted of 5,500 foot, and nearly 4,000 horse, with a good train of artillery; and with this force the King marched to Buckingham, where he stayed some days, undecided as to his further movements. Waller, meanwhile, had drawn some reinforcements out of Warwickshire, and was again in pursuit of the Royalist army. The King, no longer under the necessity of avoiding the encounter, turned back, through Brackley, towards Banbury, near which latter town the army of the Parliamentary General was now stationed. On the afternoon before June 29, the armies came in view of one another, the river Cherwell flowing between them. The King lay that night in the field, half a mile to the east of Banbury.

He was desirous of drawing Waller from the post of advantage which the Parliamentarian force occupied, and with that view moved to the northward, along the east bank of the Cherwell, while Waller followed his movements from the opposite bank. The King endeavoured to secure Cropredy bridge, but a strong detachment of the Parliamentary army forced this passage, and advanced into the fields on its eastern side, while another detachment crossed the Cherwell by a ford a mile below the bridge, and co-operated in the movement. The van of the King's army was already too far advanced to take part in the skirmish which ensued, but the rear-brigade of the Royalist horse, under the Earl of Cleveland, met the enemy's attack with a gallant resistance, and, with trifling loss on their own side, compelled the assailants to make a disorderly retreat. The Parliamentarians lost many both of their horse and foot, with some of their artillery. The Royalists pursued them as far as the bridge, but failed in the attempt to cross it, the Parliamentary General guarding successfully the passage of the river. It was not until night that the combatants separated. The two armies afterwards again drew up on the opposite banks of the Cherwell, and remained in that posture for the space of two days, when they finally moved off in opposite directions. The Parliamentary General advanced into the midland counties, in order to recruit his weakened forces, while the King moved to the westward.*

The battle of Marston Moor (July 2) was fought three days after the King's success at Cropredy bridge. It had been preceded by several other actions in the northern parts of England.

NANTWICH. — The town of Nantwich, well known in connection with its salt-works,† lies in the southern part of Cheshire, upon the right bank of the river Weaver. About a mile distant from Nantwich, in the direction of

* The fight at Cropredy Bridge, generally passed over with slight notice by historians, was of considerable importance in reference to the further operations of the campaign of 1644. It relieved the King from all fear on account of Waller's army, and enabled him to follow the Earl of Essex into the south-western counties, where he finally compelled the surrender of the chief part of Essex's army. The account of the action at Cropredy is derived from Clarendon, bk. viii.

† These were formerly much more considerable than at present. The chief supply of salt within this district is now derived from Northwich, also on the Weaver, several miles lower down its course.

N.W., is the village of Acton. Several miles farther north, within the central part of the county, is Delamere Forest, an extensive wooded tract. Fairfax gained a brilliant victory over the Royalists, near Nantwich, early in 1644.

In the winter of 1643–4, all Cheshire, with the exception of the town of Nantwich, was in the hands of the Royalists. Nantwich, strongly garrisoned by the adherents of the Parliament, was besieged by a Royalist force, under the Lord Byron. Sir Thomas Fairfax determined to relieve the place. Carrying with him a good body of horse out of Yorkshire, and recruited at Manchester by the junction of some other forces with his own, he advanced into Cheshire. His first encounter was with an outlying party of Royalists in the forest of Delamere. Six miles further on, another skirmish occurred, and then, two miles onward, in the neighbourhood of Acton, the chief action ensued. A sudden thaw, which occasioned the rise of a little stream that divided the besieging force, aided the movements of the Parliamentary General, whose victory was complete. The Royalist leader, with such of his followers as escaped from the field, retired to the city of Chester.*

SELBY.—The town of Selby, in the West Riding of Yorkshire, lies on the right bank of the river Ouse, 14 miles S. by E. of the city of York. It had formerly considerable shipping trade, but this has materially declined of late years. Selby was of importance in Saxon and early Norman times, and possessed an abbey (portions of which are included within its principal church) founded by William the Conqueror, whose third son, afterwards Henry I., was born there in 1068.

A sharp action between the Parliamentarian and Royalist followers occurred at Selby, in the spring of 1644. Sir Thomas Fairfax, the Parliamentary General, defeated on this occasion the considerable detachment of Royalist troops under Colonel Bellasis, who was taken prisoner. The defeated Royalists fled, some towards Cawood, some towards Pontefract, and the rest towards York.†

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* Clarendon: bk. viii. Rushworth: part III. vol. ii.

† Clarendon: bk. viii. Rushworth: part III. vol. ii. Clarendon speaks of the fight at Selby as of prior occurrence to the engagement at Nantwich. The exact date of the first-named event, however (April 11), is derived from Rushworth.

MARSTON MOOR.—The village of Long Marston lies at a distance of five miles to the S.W. of York, about midway between that city and the town of Wetherby (on the Wharfe), and about as far to the northward of Tadcaster. It was on the adjoining heath or moor that the Royalist cause received the most severe blow it had up to that time encountered, in the engagement fought upon July 2, 1644.*

Early in the summer of 1644, a Parliamentary force, under Lord Fairfax, aided by the Scotch army, under the command of the Earl of Leven, had sat down before the city of York. The troops that had been raised in the eastern counties, under the Earl of Manchester and Cromwell, were ordered northward, to co-operate in the siege. York was thus completely invested. Prince Rupert, resolute to raise the siege, advanced through Cheshire and Lancashire to the relief of the beleaguered city, and, uniting his division to the force under the Earl of Newcastle, raised the Royalist army in the north to upwards of 20,000 men. The besieging force was compelled to fall back in the presence of so powerful an army, and the Parliamentary Generals drew up their followers in battle array, upon Marston Moor, on the last day of June. Rupert was thus enabled, unmolested, to throw the necessary succour, in troops and provisions, into York. He then determined, in opposition to the wishes of Newcastle, to give battle to the Parliamentary army, which, meanwhile, had begun on the morning of July 2 to move off the moor, in the direction of Tadcaster. While engaged in this movement, word was brought to the Parliamentary leaders that the Prince had already commenced an attack upon their rear. The whole army immediately faced about, and prepared for the encounter. Some preliminary firing, from the artillery upon either side, took place between the hours of three and five in the afternoon, when a pause ensued, each army expecting the other to begin the attack. It was not until seven in the evening that the battle really began.†

* The battle of Marston Moor occurred at the time that the King and Sir William Waller were facing one another on the opposite banks of the Cherwell, and three days after the fight at Cropredy Bridge.

† Hume, chap. lvii.; Clarendon, bk. viii.; Pictorial History of England, bk. vii. Above two hundred years after the date of the battle of Marston Moor, the burial pits of the slain were inadvertently disturbed, in the course of some works undertaken for the purpose of drainage. The bodies were mostly found about four feet below the surface, twenty or five-and-twenty of them together, lying one over the other, in all directions and postures.

The victory gained at Marston Moor gave the Parliament the command of the entire north. Two days after the battle, the victorious army recommenced the siege of York, which capitulated on July 16 following.

ISLIP BRIDGE, OXFORDSHIRE. — Islip is a village lying between four and five miles to the northward of Oxford. The river Ray flows past the village, and joins the Cherwell a short distance below. Islip Bridge, which crosses the Ray, forms part of the main line of road communicating between the part of Oxfordshire lying within the Cherwell valley, from a few miles N. of the city of Oxford upwards, and the hilly country about Watlington, in the S.E. division of the county. A skirmish occurred at Islip Bridge on April 24, 1642, when a body of Royalists were attacked and routed by Cromwell, who had marched thither from Watlington, a small town lying at the foot of the Chiltern hills, crossing the river Thame at Wheatly Bridge, on his way.

NASEBY.— "The old hamlet of Naseby (says Mr. Carlyle) stands yet on its old hill-top, very much as it did in Saxon days, on the north-western border of Northamptonshire, some seven or eight miles from Market Harborough in Leicestershire: nearly on a line, and nearly midway, between that town and Daventry."

Naseby lies in the very centre of England, within the tract of rising ground that divides the sources of rivers which run respectively to the seas upon opposite sides of the island — the Avon (of Warwick and Stratford) to the westward, the Welland and one of the affluents of the Nen in an eastwardly direction. The ground adjoining the village is of undulating surface, exhibiting on either side hills of gentle slope; formerly open moorland, and only brought under culture within the present century. "It was on this high moor ground, in the centre of England, that King Charles, on June 14, 1645, fought his last battle." A column, erected in commemoration of the event, stands on the crown of the hill, to the north of the

village, occupying, however, a site which is above a mile eastward of the place where the battle was fought. The field of battle lay to the north-west of the village, the King's army occupying the northern side of the field, with their backs towards Market Harborough, the army of the Parliament ranged so as to face them from the southward. An expanse of upland, now known as Broad Moor, separated the two armies before the fight began, and it was there that the main brunt of the contest took place.*

The second battle of Newbury (Oct. 27, 1644) following upon the successful advance of the King into the south-western counties, had intervened between the battles of Marston Moor and Newbury. The King had marched westward, in pursuit of Essex, after the fight at Cropredy Bridge. The events connected with the movements of the opposing armies (resulting in the enforced surrender of the chief part of Essex's force, in the neighbourhood of Fowey, in Cornwall) occupied the months of August and September of that year. On the King's subsequent march towards London, the second battle of Newbury was fought.

No important contest in the open field occurred during the earlier months of 1645. The King had passed the winter at Oxford. Abortive attempts at a compromise, between commissioners from either side, who met at Uxbridge, occupied a portion of that season. When operations in the field recommenced, with the approach of summer, the Parliamentary army — remodelled after the "self-denying ordinance" — was under the command of Sir Thomas Fairfax, with Cromwell for his second in command. Oxford was threatened with siege, and, afraid of being shut up within its walls, the King left that city, at the head of an army of 5,000 foot and above 6,000 horse, intending to join his adherents in the north. Fairfax was then at Newbury, with his army. The King advanced through Evesham to Worcester, and thence marched northward towards Chester, besieged at the time by a Parliamentary force. The siege of Chester was raised on the King's approach. A change was then made in the Royal councils, and it was determined to make an attack upon the important town of Leicester, then held by a Parlia-

* There are hollow spots, of a rank vegetation, scattered over that Broad Moor, which are understood to have once been burial mounds. Carlyle: Letters and Speeches of Oliver Cromwell; vol. i. p. 174, and Appendix. A representation of the Battle—"half plan, half picture"—is to be found in Rushworth, part iv. vol. i. See also Hume, chap. lviii. Clarendon, bk. ix.

mentary garrison. Leicester was successfully assaulted upon the last day of May, and on the following morning its garrison became prisoners of war. With his army considerably weakened by losses sustained in this exploit, the King determined to march towards Oxford. Fairfax, meanwhile, was advancing towards Northampton, in search of the Royalist army. The King had reached Market Harborough, when intelligence of Fairfax's movements reached him. He continued to advance as far as Daventry, where, learning that Fairfax was already at Northampton, he found it prudent to fall back upon Harborough. Cromwell, with his levies from the eastern counties, had joined the Parliamentary General on the 12th, at a place called Flower, near Weedon, a few miles west of Northampton. On the night of June 13, the van of the Royalist army was at Harborough, its rear (with which was the King himself) quartered at Naseby. A scouring party of Fairfax's men beat up the Royal quarters, and compelled the King to make a hasty retreat to the main body of his army, at Harborough, with Prince Rupert. In the council then held, it was determined to turn and face the enemy, and the entire Royalist army advanced for the purpose, on the following morning, towards Naseby, where the battle took place. The result is well known. With Cromwell's horse thundering in his rear, the unfortunate monarch succeeded in getting into Leicester, but, not judging it safe to stay there, he rode the same evening to Ashby de la Zouch, and thence passed on to Lichfield, and so, by Bewdley, in Worcestershire, to the city of Hereford.

LANGPORT.—The battle of Langport (or Lamport, as the name is written by most historians) was fought a few weeks after the battle of Naseby, and was won by the same army that had conquered on the latter field.

Langport is a small town in Somersetshire, situated on the river Parret, near the point where it is joined by the little stream of the Ivel. Ten miles lower down the valley of the Parret, and at about that distance in the direction by N.W., is the town of Bridgewater. At a rather greater distance (nearly 12 miles by the road) to the westward of Langport, is the more considerable town of Taunton, lying within the fertile valley of the Tone, and situated on one of the chief lines of high road to the extreme west of England.

When the campaign of 1645 opened, Taunton was occupied by Blake, who, with a small Parliamentary garrison, had thrown him-

self into it in the summer of the preceding year, and had defended it with the same successful heroism that he had previously exhibited at Lyme Regis. The defenders of Taunton were hard pressed, and Fairfax had sent (in May, 1645) a detachment to the relief of Blake, before setting out to attack the King. General Goring, who had been entrusted with the command of the Royalist army in the west, renewed the attack upon Taunton, but strove in vain to drive Blake out of the place. When the battle of Naseby had destroyed the King's army, and completely broken the Royalist power in the midland counties, Fairfax set out westward, in order to give the necessary relief to the defenders of Taunton. Upon the approach of Fairfax, Goring, with his army, drew off from Taunton, and retired to Langport, fixing his quarters between the rivers about that place, in a position advantageous for defence.* There he was attacked by Fairfax. The battle appears to have been fought in the meadows to the eastward of the town. The Parliamentary General gained a complete victory. The broken troops of Goring were pursued through the town of Langport, and thence to the walls of Bridgewater, of which place Fairfax immediately began the siege.

ROWTON HEATH.—The Royalist troops were routed by a Parliamentarian force upon Rowton Heath, in the neighbourhood of Chester, in the autumn of 1645. Rowton, from which the adjoining tract of heath takes its name, is a hamlet situated between two and three miles to the S.E. of Chester, midway between the villages of Christleton and Waverton. The heath, which lies immediately to the northward of Rowton, is traversed by an ancient line of road, known as the "Street Way" (probably a Roman highway) and also, in the present day, by the line of the Chester and Ellesmere canal and that of the railway which connects the city of Chester with Crewe. The action on this spot was connected with the movement of the King on his northward march from Hereford.

A few months after the battle of Naseby, the King (who had passed a portion of the time at Ragland Castle, the seat of the Marquess of Worcester, in Monmouthshire) marched northward from Hereford with a body of horse, intending to join Montrose in Scotland. His line of march had lain through North Wales, the

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* Clarendon, bk. ix.; Hume, chap. lviii.

country about Worcester and the valley of the Severn being purposely avoided, owing to its being occupied by the forces of the Parliament, under the command of Poyntz.

When the King approached within half a day's reach of Chester, he learnt that the Parliamentary force by which it had long been besieged had made themselves masters of a portion of the suburbs. The chief part of the King's horse, under Sir Marmaduke Langdale, crossed the river Dee by Holt Bridge (7 miles S. of Chester), and approached the city from the south-eastward, their leader drawing up his force upon Rowton Heath. The King, with the rest of his followers, marched directly into the city, hoping to enclose the besiegers between the assault of the forces under Sir Marmaduke Langdale, and that of the garrison, aided by himself in person. But the Parliamentary General, who had received information of the King's movements, approached the scene of action. Acting in concert with the besieging force (whom he had apprised of his approach), Poyntz attacked with his horse the squadrons of Langdale. The latter, after some preliminary alternations of fortune, were completely routed. The flying Royalists were pursued to the walls of Chester.*

SHERBURN, YORKSHIRE.—Sherburn is a market-town in the West Riding, situated on the banks of a little stream, or burn, which joins the Ouse at Selby. It is 16 miles distant from York, in the direction of S.S.W. and on the line of road from Doncaster northward, through Tadcaster and Wetherby.

The broken remains of the Royalist army collected at Doncaster, and placed under the command of Lord Digby and Sir Marmaduke Langdale, were defeated at Sherburn, late in the autumn of 1645, by a Parliamentary detachment under Colonel Copley. This happened while the King lay at Newark. Lord Digby had set out on his march northward, to join the Marquis of Montrose: he had advanced as far as Sherburn, when his troops (consisting entirely of horse) were completely routed, with the loss of all their baggage. Some of his dispersed followers reassembled, with their leader, at Skipton, and continued their march thence as far as Dumfries, from

* This action completely destroyed the remains of the army which the King had saved from the field of Naseby. After it, Charles stayed only a single night in Chester, and retired thence to Denbigh Castle. Clarendon, book ix.; Rushworth, part iv. vol. i. The siege of Chester lasted some months longer. The city was delivered up on Feb. 3 following.

which place, deeming their enterprise hopeless,* their officers sought a refuge in the Isle of Man.†

TORRINGTON, DEVONSHIRE.—Torrington, a small market-town in the N.W. of Devon, is situated on the right bank of the river Torridge, nine miles above Bideford, and about ten miles S. by W. of Barnstaple. It formerly had a castle, which stood to the S. of the town. A Royalist force, under Lord Hopton, was defeated here, in February 1648, by the Parliamentary General, Fairfax. The action appears to have been fought upon a common adjoining the east end of the town.

Fairfax, after his victory at Langport, continued his advance westward, and rapidly overcame all opposition on the part of the Royalists in that quarter. The only considerable encounter in the open field took place at Torrington. The defeated Royalists were compelled to retire into Cornwall, where Fairfax ultimately compelled the surrender, at Truro, of such portion of their army as yet remained.‡

STOW, GLOUCESTERSHIRE.—Stow on the Wold is a market-town in the N.E. of Gloucestershire, 26 miles distant from the city of Gloucester, in the direction of E. by N., and between 18 and 19 miles to the N.E. of Cirencester.§ The town stands on the summit of a high and bleak hill, whence its distinguishing appellation. A body of troops, chiefly cavalry, with which Lord Astley was marching from Worcester to join the King at Oxford, in the spring of 1646, was intercepted here by a Parliamentary detachment, under Colonel Morgan.

The Royalists were totally routed at Stow, their leader, with most of his officers, being made prisoner. This action destroyed the last

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* Montrose had already, ere Digby set out on this enterprise (on Sept. 13), been surprised by the Scottish General, David Lesley, at Philiphaugh, near Selkirk, and compelled to fly for his life.

† Clarendon: book ix.

‡ Clarendon: book ix.

§ The road which connects Stow with Cirencester is part of the old Roman road, called the Fosse Way, between Durocornovium (Cirencester) and the station of Venonæ (or High Cross).

remaining hope of the Royalist cause. The few who escaped from the fight were so scattered and dispersed that they never came together again; "nor did there remain, from that minute, any possibility for the King to draw any other troops together." *

Two years intervened between the date of the action last referred to, and the renewed outbreak of civil war, in the spring of 1648. This second civil war was of brief duration, the vigour displayed by Fairfax and Cromwell serving to crush within a few months, in so far as their efforts in England were concerned, the insurgents against the authority of the Parliament.

ST. FAGAN'S.—The first in point of date of the contests in the open field which belongs to the renewed civil war occurred at St. Fagan's, a village of Glamorganshire, South Wales, lying about 2 miles westward of Llandaff, and twice that distance from the town of Cardiff. St. Fagan's is merely an agricultural village, with no special importance, and appears from the census of 1851 to have hardly more than five hundred inhabitants. It lies to the right of the main road which leads from Cardiff, by Cowbridge and Bridgend, to Swansea, and thence to the further extremity of South Wales.

The fight at St. Fagan's occurred while Cromwell was marching to quell in person the insurgent movements which had broken out, in favour of the King, in several places within South Wales, and before he had reached the scene of action. Colonel Horton, on behalf of the Parliament, encountered and thoroughly defeated, after an obstinate contest of two hours' duration, the Royalist forces, drawn together under the command of Major-General Langhern, who was on his way to Pembroke, where Colonel Poyer had seized the castle, and defended both town and castle on behalf of the King.†

MAIDSTONE.—The insurgent movements in Kent, against the authority of the Parliament, in the May of 1648, were

* Clarendon, book x.—Rushworth, part iv. vol. i.

† The siege of Pembroke occupied Cromwell nearly seven weeks, the place not surrendering until July 11. On his way thither, Cromwell marched by Monmouth, Chepstow, Swansea, and Caermarthen, quelling insurgent movements on his way. The fight at St. Fagan's is described in Rushworth, part iv. vol. ii.

crushed by General Fairfax, in the course of a rapid advance through the western part of that county, from Blackheath, in the vicinity of the metropolis, to the town of Maidstone.

There was no regular engagement of any considerable magnitude in the open field on this occasion. The Kentish insurgents, collected at Maidstone, had advanced in a tumultuary manner to Blackheath, in the expectation of receiving aid from members of their party in the city of London. This was on May 24th. Fairfax, drawing together the troops at his disposal, and marching over London Bridge towards Blackheath, pressed rapidly upon the retreating foe, whom he drove before him, following them up, by way of Rochester, to Maidstone, where he finally broke their force — some hard fighting occurring upon the evening of June 1st, close beside that town. The greater part of the insurgents who escaped the Parliamentary General, headed by Goring and other officers, crossed the Thames into Essex, and threw themselves into Colchester, of which place Fairfax immediately after began the siege.*

KINGSTON. — Insurgent movements in Surrey, similar to those in Kent, took place in the beginning of July, 1648, at the time that Fairfax was engaged in the siege of Colchester. The neighbourhood of Kingston-on-Thames was the principal scene of these gatherings, the military operations in connection with which extended over the tract of country intervening between Reigate in one direction, and St. Neots in Huntingdonshire in the other.

The insurgents, we are told, several hundred strong, rode from Kingston towards Reigate. A body of Parliamentary troops, under Major Gibbons, drove them back, and a sharp fight ensued "between Nonsuch Park and Kingston." The former of these places is immediately adjacent to the village of Cheam, and five miles to the S.E. of the town of Kingston, a well-known locality — an open undulating tract of country intervening. The defeated Royalists were driven

* The siege of Colchester, one of the most celebrated episodes of the civil war, occupied Fairfax a term of eleven weeks. The town was only surrendered after a close blockade had reduced its gallant defenders to the last extremities of famine. As to the fight at Maidstone, see Rushworth, *passim*, vol. ii.

across the river and pursued into Hertfordshire; thence, with the aid of a party detached for the purpose by Fairfax from the army lying round Colchester, they were ultimately followed to the neighbourhood of St. Neots, in Huntingdonshire. At this place a stand was made, and a sharp action ensued, in which the Royalists were finally routed, and completely broken.*

PRESTON.—The contest which takes its distinguishing name from Preston consisted of a series of actions which lasted over three days, and the scene of which embraced a wide tract of country, reaching from the town of Preston, on the north, to beyond Warrington in the opposite direction. To understand the various movements — among the most important in the whole civil war — which these events embraced, the reader requires to have the map of Lancashire before him, and to note the following conditions in the geography of the region concerned.

The high road from Scotland to England, by the western side of the island, runs through Lancashire from north to south, entering the county a few miles to the southward of Kendal in Westmoreland, and thence proceeding by Lancaster to Preston, situated on the north side of the Ribble, a short distance above the estuary of that river. Fifteen miles south of Preston is the town of Wigan,† and between eleven and twelve miles further in the same direction is Warrington, upon the river Mersey, and on the southern border of the county. The village of Winwick lies three miles to the northward of Warrington, on the direct line of road from Wigan thither.

The Ribble, which flows past Preston on its way to the Irish Sea, enters the county from Yorkshire, deriving its waters, in their origin, from the most elevated portion of

* See Rushworth, IV. vol. ii.—Hume, chap. lix., refers to this engagement. Clarendon appears to pass it without notice. See also Carlyle (Letters and Speeches of Oliver Cromwell, vol. i. p. 277).

† A skirmish occurred at Wigan three years later (August 1651), in which a body of troops—raised by the Earl of Derby for the service of the young King Charles II., then at Worcester — was routed by Colonel Lilburn, one of the officers of the Parliament.

the picturesque district of Craven, through which its course is southwardly (passing the town of Settle on its way), in a valley that is bounded on either side by the high summits of Ingleborough and Penygent. A short distance before it reaches the Lancashire border, the Ribble assumes a south-westerly direction, which it maintains thence to its final outlet. Between twelve and thirteen miles below this south-westwardly bend, the Ribble is joined upon its right bank by the river Hodder, which there forms the border between Yorkshire and Lancashire. A bridge (Hodder Bridge) crosses the Hodder a short way above the junction.

Below the junction of the Hodder, a continuous line of hill, several miles in length, known as Longridge Fell, stretches in a direction parallel to the Ribble, and at a distance of between two and three miles from its stream. The road from Hodder Bridge to Preston lies between Longridge Fell and the right or northern bank of the Ribble, which is not crossed by any bridge in this portion of its channel until within a mile of the town of Preston. Adjacent to the right bank of the Ribble, and along (or closely adjoining) the line of road here indicated, are the present Jesuit College of Stoneyhurst, and (3 miles lower down) the village of Ribchester. The considerable village of Whalley is on the opposite side of the valley, nearly two miles distant from the left bank of the Ribble, and somewhat higher up its valley. The river Calder, which flows past Whalley, joins the Ribble on its left bank, as also does the stream of the Darwen — the latter much lower down, immediately above Preston. The main road from Preston southward, leaving that town by its eastern quarter, crosses the Ribble by a bridge (Ribble Bridge), and almost immediately afterwards crosses similarly the stream of the Darwen. There was formerly no bridge over the Ribble below that just referred to, though there was a ford, capable of being traversed under favourable circumstances of wind and tide.

In August 1648, the Scotch army, seventeen thousand strong (twelve thousand foot, and five thousand horse), under the Duke of Hamilton, aided by a body of English Royalists numbering four thousand (two thousand five hundred foot, and fifteen hundred horse) under Sir Marmaduke Langdale, was marching southward through Lancashire. By the night of the 16th, the main body of the invading force had reached Preston, while various portions of its outlying members lay—some in rear, others in advance, part of them as far ahead as the town of Wigan. The English, under Sir Marmaduke Langdale, were encamped on the east of the town of Preston, in the direction of Longridge Chapel—about four miles up the valley of the Ribble. Cromwell, immediately on his release from the siege of Pembroke, had marched northward into Yorkshire, and had there joined the forces he had brought with him out of Wales to the northern contingents of the Parliamentary army, about Knaresborough and Wetherby. With these forces, numbering, in the total, not more than eight thousand six hundred men, he crossed the high ground which stretches along the Yorkshire and Lancashire border, descending into the latter county by the valley of the Ribble, in order to encounter the invading Royalist army.

Leaving behind him his train of artillery, "because of the difficulty of marching therewith through Craven," and for the sake of greater expedition, Cromwell advanced by way of Skipton and Gisburne to Hodder Bridge, which he crossed on August 16. He quartered his army that night in the fields by Stoneyhurst, and early on the following morning marched with his whole force down the valley of the Ribble. Upon Preston Moor, lying to the eastward of the town of Preston, the forces under Langdale and the Duke of Hamilton were encountered and completely routed by Cromwell and his men—their broken and scattered bodies flying in various directions, some to the northward, but the main body (under Duke Hamilton himself) crossing the Ribble, and advancing, with all the speed in their power, in a southwardly direction. The Parliamentary General, securing possession of the bridges over both the Ribble and the Darwen, followed the defeated Scots during the two ensuing days, pursuing them closely through the town of Wigan and thence on to within three miles of Warrington. There, at Winwick, the Scots made a stand, and a sharp action ensued, in which they were again routed by Cromwell, and pursued up to the town of Warrington, where their main body finally yielded themselves prisoners of war. The Duke of Hamilton, with about 3,000 of his horse, had meanwhile marched on, across Cheshire, through Delamere Forest, as far as the town of Uttoxeter, in the adjoining county of Stafford,

where he was obliged to surrender, with his followers, a few days afterwards.*

DUNBAR, HADDINGTONSHIRE. — Dunbar is a small seaport town on the eastern coast of Scotland, towards the entrance of the Firth of Forth, and upon the southward side of the approach to that estuary. It stands upon a high rock,† which overlooks the adjacent sea. The mouth of the river Tyne (of Haddington) is between two and three miles distant to the westward: the town of Haddington is nearly eleven miles off in the same direction, and Edinburgh at a distance of about twenty-seven miles. The high whinstone promontory of St. Abbs Head is fifteen miles off in the opposite direction, or to the south-eastward, the little hamlet of Cockburnspath lying about midway between the two localities.

To the southward of Dunbar there is a tract of heathy upland, of between one and two miles in extent from north to south, beyond which the ground rises rapidly towards the outlying ranges of the Lammermoor Hills. Upon either side of the town, and at a short distance from it, the shore-line recedes slightly inland — so that the whole tract of ground about Dunbar itself forms a kind of peninsular plateau, overlooked from the south by the hills which lie in that direction. At the foot of these hills, and at the bottom of a deep grassy hollow or ravine, there flows a little stream — the Brocksburn — which has a north-eastwardly course to the sea, passing on its way the mansion called Broxmouth House, situated near its left bank, and less than half a mile above its outlet. Adjoining the southern border of the Brocksburn valley is the eminence of Doon Hill, upon which, on the day preceding the battle of Dunbar, the Scotch army,

* The action at Preston, and the movements of the two following days, are described in Cromwell's own letters, given in Carlyle (Letters and Speeches, vol. i.) — See also Clarendon, book xi.

† "On one of those projecting rock-promontories with which that shore of the Firth of Forth is niched and vandyked, as far as the eye can reach." (Carlyle.)

under General Lesley, was encamped. The English army, under Cromwell, lay upon the upland to the northward of the burn — between it and the town of Dunbar, hemmed in within the peninsular tract above described. The London road (from Edinburgh and Haddington southward), crosses the intervening valley at the hamlet of Broxburn, as also now does — at a distance of not more than a quarter of a mile to the south — the line of railway which connects Berwick-upon-Tweed with the Scotch capital.

The battle of Dunbar was fought, in so far as the main brunt of the action is concerned, immediately on the south-eastern side of the burn, on the ground crossed by the lines of high road and railway, at a spot which measures just a mile and a half from the town of Dunbar to the S.E., and hardly more than a mile to the north-eastward of Doon Hill, on which the Scotch army had fixed their camp the day before the contest. This locality — not far removed from a battle-field of earlier date in Scottish history * — was the scene of the decisive victory gained by Cromwell on September 3, 1650.

The breaking out of the war with Scotland, in the summer of 1650, involved the northward march of Cromwell, in command of the English army. Cromwell entered Scotland by the great road along the east coast, passing from Berwick through Cockburnspath, Dunbar, and Haddington, to the neighbourhood of Edinburgh, in which city (or within its eastern suburbs) the Scotch army lay. Cromwell was compelled to confine his movements to within a short distance of the coast, from the necessity of maintaining communication with his ships, whence he drew the supplies of provisions for his troops. The English army reached the neighbourhood of Edinburgh towards the close of the month of July, Cromwell fixing his head-quarters at the little town of Musselburgh, on the shores of the Firth of Forth, five miles east of Edinburgh. Thence the English

* In 1296, when Edward I. defeated the Scotch army under Baliol. The exact locality of this older battle-field is a mile and a half due S. of Dunbar, on the northern side of the burn, and less than a mile distant from Doon Hill. A space of nearly a mile and a half separates the two battle-fields.

army moved forward to the adjacent slopes of the Pentland Hills, immediately fronting Edinburgh from the southward, while the Scotch maintained, unmoved, their position within the eastern outskirts of the city and the ground lying between it and the neighbouring firth, "from Leith shore to the Calton Hill." The month of August passed without any material change in these positions of the respective armies, the English General seeking in vain to draw the Scots out to battle. Towards the close of the month, a skirmish took place on the western side of the city, consequent upon a movement by the English in the direction of Stirling. On August 30, it was determined by the English leaders, in a council of war held at Musselburgh, to retire to Dunbar, and the English army began to move thither on the following day. The Scotch General, Lesley, immediately followed in pursuit—the vanguard of the Scots entering Prestonpans before the rear of the English were well out of it. During the following day, Lesley hung close upon Cromwell's rear. On Monday, September 1, the two armies were in the position above described—the Scotch upon Doon Hill, the English upon the moorland tract to the northward, with the town of Dunbar and the sea behind. Cockburnspath and its pass, to the eastward, were in possession of the Scotch, and the English seemed to be enclosed on every side by an army which vastly outnumbered their own.

Upon the afternoon of September 2, the Scotch General began to move his army down from the slopes of Doon Hill to the eastward, with the intention of hemming in the English more completely on that side. Cromwell and his officers, observing the movement, determined at once upon attack. The men lay in arms during the night, and at early dawn of September 3, the English crossed the burn which intervened between themselves and the enemy, carrying confusion and defeat into the Scottish camp, as "over St. Abbs Head and the German Ocean, just then, bursts the first gleam of the level Sun." *

WORCESTER. — The battle which takes its name from the city of Worcester — the concluding engagement of the civil war — was fought on September 3, 1651.

The old cathedral city of Worcester lies within one of the most fertile portions of the Severn valley, principally upon the left or eastern bank of that river. The suburb of St. John's, connected with the city by a bridge which crosses the Severn, is on the west side of the river. A mile and a

* Carlyle: Letters and Speeches of Oliver Cromwell, vol. ii.

half below the city, the Severn is joined on its right bank by the river Teme, coming from the Welsh mountains, and over which there is a bridge at the village of Powick, about a mile above the point of junction. Eleven miles below Worcester (measuring by the windings of the stream) is the little town of Upton-upon-Severn, which stands upon either bank of the river, its two parts joined by a bridge. The battle of Worcester was fought upon both sides of the Severn, the main brunt of the contest being in the meadows to the south-eastward of the city.

The young King, Charles II., had in the summer of 1651 advanced into England at the head of a Scotch army. Marching southward through Lancashire, and thence by way of Shrewsbury, he rested at Worcester, where the royal standard was displayed on August 22. Cromwell, following close upon his line of march, hastened towards the same point, which he approached by way of Evesham, from the south-eastward. Cromwell's force came in sight of Worcester on August 28. The battle was fought six days later.

The Royalists had made an attempt to destroy the bridge over the Severn at Upton, but the work had been so imperfectly accomplished that a detachment of Cromwell's forces crossed the river by it, on the night after their arrival, and succeeded in maintaining their post upon the western bank. On the evening before the battle, General Fleetwood, with a considerable part of the Parliamentary army, crossed the Severn by the same means, it being determined that Fleetwood should attack the Royalist posts at St. John's, the western suburb of Worcester, while Cromwell himself assailed the outposts of the city from the south-east. In the latter direction, near the London road, the defenders of Worcester had erected an entrenchment to which they had given the name of Fort Royal.

It was necessary for Fleetwood's division to cross the Teme, in order to reach the St. John's suburb. The bridge at Powick, over that river, was in possession of the Royalists. Fleetwood therefore threw a bridge of boats across the Teme, close above its junction with the Severn, and also another bridge of boats over the Severn itself, by means of which his own and Cromwell's divisions could communicate with one another. To do this took up the greater part of the day, and it was 5 o'clock, on the evening of Wednesday, September 3, before the fighting began. Charles, with his council of war, had during the afternoon viewed the preparations from the roof of Worcester Cathedral. Fleetwood, on the south-west, drove the Scots before him, from hedge to hedge, and made himself master of the western

suburb, not without hard fighting; but the principal struggle was in the south-east, by Fort Royal and Sudbury Gate, where Cromwell was engaged in person, and where the contest was vigorously maintained through four or five hours of hard fighting. The defeated Royalists were ultimately driven back into the city, and through the streets towards its northern extremity, whence those who were enabled (including the King himself) made their escape.*

* See Cromwell's letters, in Carlyle (Letters and Speeches, vol. ii.) "Fort Royal," says Carlyle, "is still known at Worcester, and Sudbury Gate at the south-east end of the city is known, and those other localities here specified." Also, Clarendon, book xiii. The house in which Charles found temporary refuge, before his final escape from the captured town, is still standing.

CHAPTER XIII.

PROGRESS OF ENGLISH COLONISATION—THE EIGHTEENTH AND NINETEENTH CENTURIES.

THE great era of colonisation, on the part of the English nation, corresponds to the 17th century. The western continent—then, more literally than at subsequent epochs, a "New World"—was the attractive field of adventure, alike to the natives of Britain and nearly all other European lands. With the single exception of Georgia, all the lengthened chain of settlements extending along the Atlantic seaboard of North America, from New England southward, had been already planted before the 17th century came to its close. Most of them were of English origin, and even those due to other nations for their origin had gradually become English.*

It is not a little curious to observe that while, before the succeeding century approached its close, the British colonies in this region had become an independent nation, Britain had at a somewhat earlier date acquired the sovereignty over a large adjacent territory, discovered and originally colonised by the subjects of a rival power. The colonies originally English claimed in 1776 the rank of an independent power, under the title of "The United States of North America," and their existence as such was recognised by Britain in 1783. The fertile valley of the St. Lawrence, which down to 1759 owned the dominion of France, had meanwhile passed under the rule of Britain, and has from that time downward been the principal scene of British settlement in the New World.

* See *ante*, p. 214, et seq.

The discovery, by Europeans, of the great river St. Lawrence belongs to the heroic times of the 16th century, and to the earlier half of that period. It was the work of Jacques Cartier, a native of St. Malo, in Brittany, the people of which region took a prominent share in the maritime adventures of the age. Cartier sailed from St. Malo in the spring of 1534, with the purpose of exploring the coasts of Newfoundland—the seas adjoining which were already the resort, for the purpose of fishing, of the maritime populations of Europe—and of planting a French settlement in their neighbourhood. Reaching Newfoundland in the neighbourhood of Cape Bonavista, and exploring portions of the adjacent coast, he proceeded to the southward, and entered the extensive gulf into which the river St. Lawrence discharges its waters. The Bay of Chaleurs, on the west side of the gulf, was visited and named on this occasion. Returning to France, he carried with him, on the promise to bring them back the following year, two of the children of one of the native chiefs with whom he had been in intercourse.

In the summer of 1535, Cartier, with a better equipment (consisting of three small ships, instead of two, as on the prior voyage), renewed his enterprise, and, again entering the gulf, soon found himself within the estuary of a great river, named by him the St. Lawrence—*Hochelaga* was the name which the natives with whom the Frenchmen came into contact gave to the river itself, as well as to a town described as situated far up its course. Cartier determined to sail up the great stream, in spite of some attempts made by the native dwellers on its banks to turn him from his purpose. Passing on the north side of the island of Anticosti, he reached in succession the mouth of the Saguenay, the Island of Orleans, the expanse of Lake St. Peter, and, finally, the city of Hochelaga itself, which he found to be situated at the foot of an eminence on which he bestowed the name of Mont Royal. Time has changed this into

Montreal. Cartier wintered, on his way up the stream, on the banks of the river St. Croix (afterwards St. Charles) immediately below the site of Quebec. The Frenchmen admired, as they could not fail to do, the rich and varied beauty of the shores between which they sailed. Hochelaga itself, the residence of a native sovereign, was situated amongst rich and well-cultivated fields of corn. After passing a second winter, which they found of great length and severity, on the banks of the St. Lawrence (beside a river named after Jacques Cartier himself), the adventurers returned to France, taking with them several chiefs of whose persons they had gained possession by stratagem. Cartier sailed on his return course by the south side of Anticosti island, and recognised the true relationship of the river which he had been engaged in exploring to the gulf which receives its waters, and to the neighbouring island of Newfoundland.

Francis I. was at the time on the throne of France, and it was under his immediate sanction that, four years after the date of Cartier's return from his second voyage, preparation was made for planting a settlement on the banks of the newly-found river of the west. In 1540 the King, by letters patent, named as his viceroy and lieutenant-governor in Canada, Hochelaga, Newfoundland, Belle Isle, Saguenay, &c., a gentleman of Picardy—Jean François de la Roque, seigneur de Roberval, whose countenance of Cartier's views had mainly contributed to overcome the opposition which they had encountered at the French Court. Cartier himself, with the title of captain-general and master pilot, was appointed to the charge of five ships, designed to carry out the undertaking. Delays, however, occurred in the completion of the equipment, and in 1542 Cartier set sail with two only of the vessels, leaving the other three to follow, as they did, though unaccompanied by Roberval himself. The erection of a fort, to which the name of Charlesbourg was given—within the valley of the river St. Charles, and not far distant from the site fixed on

at a later date for Quebec—was the result of Cartier's enterprise on this occasion. But the severities of winter, combined with dissensions amongst his followers, prompted the relinquishment of his design. On his way homeward, Cartier encountered upon the coast of Newfoundland Roberval himself, from whom he had long been vainly waiting intelligence. Roberval now vainly sought to induce his resumption of the ill-fated and futile enterprise.

The project of permanent settlement on the great river of the western world was not relinquished by the French nation. Tadousac, at the mouth of the Saguenay river, became and continued a resort for the purpose of trade in furs, and adventurers paid visits at intervals to the adjacent lands. But the first permanently successful step in the way of colonisation was made in the early years of the 17th century by Samuel Champlain, a descendant of a noble family of Saintonge. The then King of France was Henry IV., to whom Champlain had rendered service during the wars of the League. Champlain sailed in 1603 with the express purpose of extending the discoveries of Cartier, and of founding establishments within the regions visited by that navigator. He ascended the St. Lawrence as far as the Sault St. Louis, which had formed the limit of Cartier's second voyage, and returned to France in the autumn of the same year. Revisiting the same field of adventure in the following spring, Champlain passed 1604 and the three succeeding years in exploring Acadie (Nova Scotia) and the coast thence southward to Cape Cod, returning to France in 1607.

Again sailing for America in 1608, Champlain founded the city of Quebec. Taking part in the hostilities between rival nations of Indians, he penetrated in the following year from the St. Lawrence southward to the country of the Iroquois, and, ascending the "river of the Iroquois"—afterwards known as the Richelieu—reached the considerable lake which has since borne his own name. In the course of renewed undertakings pursued during the years which immediately followed, the course of the river Ottawa was traced, the western shores of Lake Huron visited, and Lake Ontario seen for the first time. Champlain, however, vainly sought to obtain from his patrons at home the means necessary to the successful issue of his undertakings. The period was a troubled one for France, and the Prince of Condé, who had been invested with the nominal vice-royalty of "New France," could do no more than lend him the sanction of his great name. In 1620, however,

fortified by the patronage of the Duc de Montmorency, to whom the vice-royalty had been transferred, Champlain finally determined to cast in his lot with the colony of which he had been the founder, and, accompanied by his family, again sailed for Canada, with powers to act as governor of the infant settlement. Quebec, however, advanced but slowly, and sixteen years after its foundation, consisted of no more than fifty houses. In 1628, want of provisions compelled its surrender to an English expedition (under the command of David Quer, or Kirk, as the name is variously written)—Huguenot wars and the siege of Rochelle were in course of transaction, and the French and English nations at war —but it was restored to France two years later, and Champlain subsequently resumed the government. He died at Quebec in 1635. Montreal, Trois Rivières, Sorel, Niagara, Detroit, and numerous other towns founded about this period, or within the century immediately succeeding, attest the spread by slow stages of French settlement within the St. Lawrence valley. In 1663, Louis XIV., by the advice of his able minister Colbert, erected Canada into a royal government, with the laws and usages of France. The progress of the colony was, however, subject to frequent interruption, alike from hostilities with native Indians and with the neighbouring colonists of Britain.

The French claimed to exercise dominion, during the same period, over the vast region of the Mississippi, and the wide-stretching schemes which marked the policy of Louis XIV. aimed at the union of New France with the territory watered by the great river of the south. In 1673, Marquette and Joliet, two enterprising Jesuit missionaries, descending the stream of the Wisconsin, entered the Mississippi, and voyaged down that river to below the parallel of 33°. The first settlement was established at Iberville (above New Orleans) in 1699. The city of New Orleans was founded in 1718: St. Louis (from the side of Canada, and as a trading port with that region) in 1764. Before this latter date, however, the sovereignty over the St. Lawrence valley had passed away from France.

The proximity of the French and English in the New World was naturally attended by frequent collisions between the outlying settlers of either nation, and the wars in which the parent countries were so frequently engaged at home were reproduced (often with the attendant horrors of Indian warfare) in their settlements abroad. In the war which broke out towards the close of the reign of George II.—the "Seven Years' War"— the great minister

who at the time directed the foreign policy of the English nation determined to strike a blow at France within her possessions in the west. The "great Commoner" aimed at nothing less than the final substitution of English rule for that of France in the valley of the St. Lawrence and its lakes, and Wolfe was amongst those whom he selected as the instruments of his design. The "New France" of that day nominally included, besides Canada and New Brunswick, the adjacent territory of Acadie — the modern Nova Scotia. Part of the latter, however, had already passed under the rule of Britain; the town of Halifax, the first permanent settlement of the English in this region, had been founded in 1749. The island of Cape Breton was still French, and Louisbourg, on its south-eastern shore, was, when the war broke out in 1756, a naval fortress of great strength.*

It was in 1758 that Louisbourg, attacked by a squadron under Boscawen, with Amherst at the head of the military force, and Wolfe at the head of a division of the latter, was compelled to surrender, and the whole island of Cape Breton was speedily reduced. Its fortifications were razed to the ground, and the place itself became almost deserted.†

Forts Ticonderoga and Crown Point, on the shore of Lake Champlain, were captured by the English, under Amherst, in the summer of the following year: Niagara and Montreal were in like manner reduced by another division of the British forces, under Prideaux. But the great exploit which marked 1759 was that in which the English were led by Wolfe. Ascending, in the stillness of a September night, the St. Lawrence from the Isle of

* Louisbourg had indeed been captured by a body of New England colonists in 1745, and retained for ten years, when it was restored to France.

† "The harbour (says Bancroft) still offers shelter from the storms; the coast repels the surge; but a few hovels only mark the spot which so much treasure was lavished to fortify, so much heroism to conquer." —*History of the American Revolution.*

Orleans to a point about two miles above Quebec, Wolfe and his men climbed the heights which flanked the plateau at the eastern extremity of which Quebec is situated—the Plains of Abraham. There Montcalm, the French commander, drew out his lines to meet his foe, and there the battle in which Wolfe died a hero's death was fought (Sept. 13, 1759). Quebec capitulated within a few days of the battle, and the treaty negotiated at Paris in 1763 assured the transfer of Canada from French to English rule.

The total population of Canada at this period was only about 65,000, and these were nearly confined to the lower portion of the St. Lawrence valley—the "Lower Canada" of later geography. Many of the loyalist population from among the revolted colonies of Britain made Canada their home, during and after the War of Independence, settling within the tracts bordering on the great lakes (Upper Canada), and adding largely to the population—consisting chiefly of Indians, with a few French immigrants—by whom alone it had been hitherto occupied. In 1784, the total population had risen to 113,000. The greater portion of Upper Canada, however, still remained, many years after the date of English possession, an almost unbroken wilderness. The rapid growth of population exhibited by the upper portion of the St. Lawrence valley dates only from the earlier years of the present century.

An Act of the Imperial Parliament passed in 1791 first constituted Upper Canada a distinct province, with its own local administration, and Houses of Assembly for the two distinct colonies (Upper and Lower) into which the St. Lawrence valley was thus divided.

Canada, and, with it, the adjacent provinces of New Brunswick and Nova Scotia, has since remained in loyal allegiance to the British Crown. A bold but unsuccessful attempt upon Quebec was made by the Americans in 1775, during the War of Independence. In 1837–8 an abortive insurrection, originating chiefly in mutual dis-

contents between the French and English elements composing the Canadian population (the former dominant in the lower province), disturbed for a while the peace of the St. Lawrence valley, and resulted in the re-union of Upper and Lower Canada into a single province. More important in its probable issues, in relation to the future of English dominion in the New World, is the formation in 1867 of a federal union between the provinces of Canada, Nova Scotia, and New Brunswick, under the general title of the "Dominion of Canada."

The "Dominion of Canada," as established in 1867, embraced, under the conditions of a common legislature sitting at Ottawa, the four provinces of ONTARIO (Upper Canada, or Canada West), QUEBEC (Lower Canada, or Canada East), NOVA SCOTIA, and NEW BRUNSWICK. To these have since been added (1870) the provinces of MANITOBA (the former "Red River Settlement," a tract of country lying round the head of Lake Winnipeg and embracing the lower valley of the Red River, which flows into that lake from the southward); BRITISH COLUMBIA, an extensive province lying west of the Rocky Mountains, and within which the large neighbouring island of Vancouver is included; and, still more recently (1873), PRINCE EDWARD ISLAND, in the Gulf of St. Lawrence. The sovereign rights exercised, from the time of Charles II. downward, by the Hudson Bay Company over the vast wilderness of land lying north of Canada and stretching west and north from the waters of Hudson Bay to the Rocky Mountains and the Arctic Ocean, have been transferred to the newly-formed "Dominion," and Canada, in its larger sense, now stretches over the entire breadth of the North American continent, from the Atlantic to the Pacific.

British Columbia, now a member of the "Dominion of Canada," was first formed into a colony in 1858—a pro-

cedure consequent on the discovery of valuable gold-fields within the valley of the Fraser, the principal river of that region. Great portions of the country which it embraces fell within the area known as the "Oregon Territory," long the subject of dispute between Great Britain and the United States, but the division of which between the two powers (the line of the 49th parallel marking the boundary) was settled by treaty in 1846. Vancouver Island, which had been formed into a distinct province in 1849, was united to British Columbia in 1866.

ENGLISH DOMINION IN THE EAST.

THE battle of Plassey (1757) marks the beginning of British sovereignty in India. This sovereignty, however, has had to be contested year by year, at first with the French and their native allies, and, at later periods, with the native princes themselves. The growth of English power in the East involves a history to which scarcely more than the briefest reference can be made here—a history in which ambition, intrigue, and grasping covetousness, as well as conduct on numerous fields of warfare, have had their part. The incidents connected with the latter arrange themselves chiefly under the following headings—the WARS IN THE CARNATIC, embracing more or less completely the whole period from the date of Clive's earliest exploits downwards to the close of the century; the most important of them, directed against Hyder Ali and his son Tippoo Saib, belonging to the years 1780–1799:—the MAHRATTA WARS, from 1775 downward, and, of most importance, that including the years 1803–1806:*—the FIRST BURMESE WAR, 1824–1826:—the AFGHAN WAR, 1838–1842:—the SINDE WAR, 1843:—the renewed war with MAHRATTA FEUDATORIES (Gwalior, &c.), 1843:—the SIKH

* The battle of Assye belongs to the year 1803.

WAR, 1844–1849 :*—the SECOND BURMESE WAR, 1851–2. To these may be added, the Mutiny of the Bengal Native Army in 1857, with the incidents necessary to its suppression.

CHRONOLOGICAL TABLE OF ACQUISITIONS MADE BY THE BRITISH IN INDIA.

Date	Name of Territory	Circumstances of Acquisition
1639	Madras, Fort St. George	Grant from native prince
1668	Bombay	Transferred from Portugal
1676	Hooghly (partial possession of) . . .	Granted by Mogul
1689	Tegnapatam (near Madras): Fort St. David built .	By purchase
1698	Calcutta: Ft. William built	By purchase
1755	Severndroog and Bankote, on Malabar coast . .	Taken from Mahratta pirate
1759	Masulipatam, and other places in S. of India .	Captured from Soubahdar of Deccan
1760	Burdwan, Midnapoor, and Chittagong . . .	From Nabob of Bengal
1765	Bengal, Behar, &c., with Chingleput . . .	From Mogul
1766	The Northern Circars .	By treaty with Nizam
1775	Salsette and Bassein: also Benares . . .	Treaty with Mahrattas: Soubahdar of Oude
1792	Malabar, Dindigul, Salem, and adjacent territory .	Taken from Sultan of Mysore (Tippoo Saib)
1799	Coimbatore, Canara, and other portions of Mysore	From Tippoo Saib, by partition treaty of Mysore
—	Tanjore	By treaty with Rajah
1800	Surat	By treaty with Nabob
—	Further portions of Mysore	By cession from Nizam
1801	Portions of Carnatic (Arcot, &c.) . .	From Nabob of Carnatic
—	Rohilcund, and parts of the Doab . . .	By treaty with Soubahdar of Oude
1802	Furruckabad and adjacent territory . . .	By cession from Nabob

* It is to the incidents of this war that the battles of Moodkee and Ferozeshah (1845), of Aliwal and Sobraon (1846), the occupation of Lahore (1846), the capture of Mooltaun (1849), and the battles of Chillianwallah and Goojerat, both in the last-mentioned year, belong.

Date	Name of Territory	Circumstances of Acquisition
1803	Cuttack, and the Cuttack Mehals . . .	By conquest from Mahrattas
—	Delhi, Ahmednuggur, and lower Doab . . .	By conquest from Mahrattas
1805	Parts of Gujerat, and the Bundelcund . . .	By conquest from Holkar and other Mahratta chiefs
1815	Kumaon, and parts of adjacent hill-territory .	By conquest from Rajah of Nepaul
1817	Ahmednuggur, Ahmedabad, &c. . . .	The former conquered from Peishwa; the latter ceded by Guicowar
1818	Kandeish, and adjacent territory . . .	By conquest from Holkar, &c.
—	Poonah, Northern Concan, &c. . . .	Conquered from Peishwar
1826	Assam, with Arracan and Tenasserim . . .	By conquest from Burmah
1834	Coorg	By conquest from Rajah
1843	Sinde	By conquest from Ameer
1844	Serampore and Tranquebar	By purchase from Denmark
1846	The Jullindar Doab (between Beyas and Sutlej rivers) . . .	By conquest from Sikhs
1848	Sattara	Annexed on death of reigning Rajah
1849	The Punjaub . . .	By conquest from Sikhs
1852	Pegu	By conquest from Burmah
1854	Nagpore territory . .	Annexed on death of Rajah
—	Jhansi	Annexed on failure of heirs
1856	Oude	Annexed on deposition of native sovereign
1865	The Bootan Dooars . .	By conquest from native Rajahs

The suppression of the great Mutiny was attended by a complete change in the relationship which the British possessions in India had hitherto borne to the Crown. By an Act of the Imperial Legislature, passed in the following year (1858), the political functions of the East India Company were abrogated, and British India, with its millions of inhabitants,* was placed under the direct rule

* Above 190,000,000 in 1871.

of the Sovereign of Great Britain and Ireland, whose power is exercised through the medium of a Governor-General, with subordinate governors (Lieutenant-Governors in some cases, Chief Commissioners in others) over the various great provinces into which the whole is divided. Bengal, Madras, and Bombay, remain distinct Presidencies, the Governor of the Bengal Presidency being at the same time Governor-General of British India. The great provinces of the Bengal Presidency are—BENGAL (within which Behar, Orissa, and Assam, as well as Bengal Proper, are included), under a Lieutenant-Governor; the NORTH-WEST PROVINCES, under a Lieutenant-Governor; the PUNJAUB, under a Lieutenant-Governor; OUDE; the CENTRAL PROVINCES; and BRITISH BURMAH, each under a Chief Commissioner: MADRAS and BOMBAY (to the latter of which Sinde is attached) are each under a Governor, with authority over the respective presidencies which they constitute.

CEYLON forms a distinct dependency of the Crown. The Portuguese first established commercial intercourse with this island early in the 16th century, entering into treaty with the King of Kandy, its native ruler. A share in this trade was subsequently disputed by the Dutch, and, later, by the English, many sanguinary contests taking place between the respective nations. The Portuguese were ultimately supplanted by the Dutch. The coast-districts were taken from the latter by the English towards the close of the last century (1795); the interior remained under the government of the native King of Kandy until 1815, when he was deposed by the British, and their authority extended over the whole island.

ENGLISH DOMINION IN THE SOUTH.

The Portuguese were the discoverers of Australia. There is undoubted evidence in proof of the knowledge, by the mariners of that nation—whose voyages to the east date from the closing years of the 15th century—of the existence of extensive lands to the south-eastward of Java and the neighbouring islands at an early period in the 16th century.* It was nearly a century later in date that the Spaniards, under De Quiros and Torres, seeking for a "Terra Australis," visited some of the numerous islands that lie to the north-eastward of the Great Southern Continent—(the name of "Australia del Espiritu Santo" was bestowed by De Quiros upon one of the New Hebrides group, while Luis vas Torres, his second in command, sailed, in the course of the same voyage, through the strait that divides New Guinea from the Australian mainland)—and that the Dutch, in the prosecution of their commerce in the east, fell in with a land which limited the waters of the Indian Ocean in that direction. Whatever may be said (and with perfect justice) in favour of the claim of the Portuguese to prior knowledge of the Australian coast, it is to the Dutch that the first authentic acquaintance with, and description of, the continent of the south is due.

In 1606, a Dutch vessel, the Duyfhen, sailed along part of the Australian coast, on the east side of the great inlet

* The quarter of a century which succeeded the time of Vasco da Gama, whose voyage of 1497–9 was the inauguration of maritime traffic, by way of the Cape, between the East and the West, was the brilliant period of Portuguese enterprise. Within half a generation from the date of Da Gama, says a modern explorer, "the coasts of Eastern Africa were linked into a chain of forts and factories, of monasteries and mission-houses, extending from Lisbon to Japan, and composed a single province of an empire bounded by a meridian drawn, with a magnificent hand, from the Arctic to the Antarctic Pole." The splendour of this dominion paled before the growing greatness of a rival nation, Spain; but the Portuguese retained their supremacy over the commerce of the East for the better part of another century.

now known as the Gulf of Carpentaria. The name of Cape Keer-weer (or Turnagain) marks the farthest limit of the voyage—which, however, like that of the Spaniard, Torres, was prosecuted under the belief that the land they were coasting formed part of the shore of New Guinea.

In the interval between 1616 and 1627, the Dutch visited and really explored a large portion of the Australian shores, embracing nearly all the northern and western, as well as great part of the southern, coast-line.*

A more systematic effort was made by the same people a few years later, in the expedition commanded by Jan Abel Tasman, who sailed from Batavia in 1642 on a voyage of discovery to the Great South Land. One of the main objects of Tasman's enterprise was to ascertain how far "Terra Australis" extended towards the south, and both in this and other regards it was attended with full success. Tasman discovered, between 42° and 43° south, land, on which he bestowed the name of Van Diemen, in honour of the governor of the Dutch East Indian colonies, his patron. He supposed this to form a portion of the southern continent (a mistake not rectified until the lapse of nearly a century and a half), and, sailing round its southernmost point, accomplished one great object of his undertaking. Thence continuing his voyage to the eastward, he, first amongst Europeans, fell in with New Zealand ("Staten Land" was the name he gave it), and, passing through the groups of the Friendly Islands and others in that locality, finally returned to Batavia by the northern side of New Guinea. He had thus accomplished the circumnavigation of the Australian continent, though (as it subsequently appeared) without actually visiting any portion of its coasts. It was not without just right that

* The names of Dirk Hertog Island and Endraght Land, Arnhem Land, Edel Land, De Witt Land, Leeuwin Land, Nuyts Land, and others, long attached to different parts of the coast, and some of them only displaced from our maps within a recent date, attest the extensive range of Dutch discovery on the Australian shores. The name Carpentaria is likewise of Dutch origin.

the States-General subsequently bestowed the name of "New Holland" upon the westerly half of the newly-visited land.

The Dutch voyages to Australia, however, were fruitless of result. For upwards of a century after the date of Tasman's enterprise the shores of Australia were almost forgotten by the nations of Europe. The only noteworthy exception occurs in the case of William Dampier, a bold and sagacious Englishman (of buccaneering celebrity) who was sent by King William III., in 1699, on an expedition for the discovery of new countries, as well as for the fuller examination of the shores of New Holland and New Guinea.* Dampier reached the western coast of New Holland at the spot where it had been visited by its early discoverer, Dirk Hertog, and gave to the adjacent inlet the name of Sharks Bay, from the multitude of those rapacious monsters by which he found it infested. He saw with great astonishment the kangaroos jumping about on shore, and farther northward fell in with some of the natives of the Australian race, whom he described as "the most unpleasant-looking and worse-featured of any people" he had ever seen.

No other noteworthy event occurs in the record of Australian discovery until the later half of the 18th century, when James Cook, the English navigator, made his famous voyages. The date of Cook's first voyage of circumnavigation—of which the prime object was the observation, from a station within the southern hemisphere, of a transit of the planet Venus over the sun's disk—was 1768. In the course of this voyage the eastern seaboard of Terra Australis, through nearly its entire length, was for the first time visited and partially surveyed. Of the extensive mari-

* The first voyage, of which the prime object was the advancement of science, undertaken by the English nation, and of which the expeditions commanded by Cook, Parry, Ross, Franklin, and others, are the legitimate sequents. Honour to the memory of Dampier, and of his patron, Dutch William!

time region thus visited, Cook took possession in the name of his sovereign, King George III., giving it at the same time the name of New South Wales. The inlet which, in recognition of the many unaccustomed forms of vegetable found upon its shores by Mr. (afterwards Sir Joseph) Banks, who accompanied him on this occasion, Cook named Botany Bay, afforded for a time shelter to his vessel, the "Endeavour," with means of refreshment to her crew.

The colonisation of New South Wales, commenced within rather less than twenty years after the date of Cook's visit to its shores, was the direct result of the attainment of independence on the part of the revolted colonists of Britain in the western hemisphere. When no longer able to dispose of convicted criminals by adding them to the number of her American colonists—now grown into citizens of the United States—the British Government, after some unsuccessful attempts at the employment of convict-labour at home, determined on the formation of a penal settlement at the antipodes. Cook's favourable account of Botany Bay was not forgotten, and that distant locality—fourteen thousand miles from the parent country, accessible in those days only by a lengthened voyage, and environed by conditions which might seem to render escape from such a prison-home all but impossible—was determined on as a suitable locality for the experiment. Free settlers, it was hoped, would in course of time become mixed with the convict element, as proved ultimately (and in much larger measure than the most sanguine could in those days have anticipated) to be the case: but it was as a convict establishment that the first settlement planted on the Australian seaboard originated. The great majority of those of whom it consisted—more than three-fourths of the whole—were convicted criminals. A fleet of eleven sail, commissioned to convey these pioneers of Australian colonisation to their new home, and placed under the command of Captain Phillip, an officer of the Royal Navy of Britain, appointed the first governor of New

South Wales, departed from Portsmouth in May, 1787, and reached Botany Bay, their allotted destination, in January, 1788.

The shores of Botany Bay were not, however, destined to become the scene of the labours incident to the planting a colony in the hitherto unexplored wilderness. Captain Phillip thought them unsuitable for the purpose, and, examining Port Jackson, an opening which had been seen by Cook a short distance to the northward, recognised in it a place which offered the desirable conditions. The shores of Port Jackson—the "queen of harbours"— exhibit numerous recesses, off-sets from the main harbour, upon either side, and beside one of these inlets (Sydney Cove was the name bestowed upon it) Captain Phillip disembarked his convicts. The 26th of January, 1788, witnessed the hoisting of the British flag on the shores of New South Wales, and the foundation of the city of Sydney.

It is unnecessary to trace here the successive stages which mark the progress of New South Wales. This progress, until within a comparatively recent date, was by no means rapid. For the first thirty years of its existence New South Wales was hardly anything more than a convict-settlement. The influx of free immigrants did not become considerable until after the lapse of that period—before which time, however, the unsurpassed capabilities of the Australian soil for the purpose of the sheep-farmer had already been thoroughly recognised. Twenty years after the foundation of the settlement its total population was not more than 10,000, and nearly half a century after its origin (1836) had only risen to 77,000, two-fifths of whom were actual convicts, and a large proportion of the remainder emancipated criminals.

Five-and-twenty years had elapsed before the "Blue Mountains" were crossed. But, once traversed, and the town of Bathurst, at the western foot of the range, founded, the vast expanse of inland plain lay open to the settler, and its exploration, with consequent occupation by

the squatter, continued to advance. The coast-region, north and south of Port Jackson, was brought, meanwhile, under the hands of the cultivator, and settlements planted upon the shores of its various bays and estuaries. Van Diemen Land (or Tasmania) was early recognised as an island, distinct from the Australian mainland, and the name of Port Phillip given to the fine opening on the north side of the dividing channel—Bass Strait. In the other direction from Sydney, Moreton Bay became, as early as 1824, the seat of one of the dependent settlements of the parent colony. With lapse of time and the growing success which attended sheep-farming, the number of free immigrants increased so as to exceed the convict element, and, gradually, to absorb or overpower it. Transportation to New South Wales, on the part of the mother country, was discontinued in 1841. A date just ten years later (1851) marks the beginning of gold discovery, to the attractions of which the later rapid growth of Australian population is mainly due. It was in the immediate neighbourhood of Bathurst, N.S.W., that the existence of the attractive ore was first recognised.

It is out of New South Wales that Tasmania, Victoria, and Queensland have grown.

TASMANIA—hitherto, under the name of Van Diemen Land, only a penal dependency of New South Wales (first settled as such in 1803)—was raised to the position of a distinct colony in 1823. It continued to be used by Britain as a convict-colony down to 1853, when transportation thither was finally discontinued.

Hobart Town, the Tasmanian capital, was founded in 1804.

VICTORIA, originally the "Port Phillip District" of New South Wales, had already, in 1850, a year before the date of the gold-discoveries, been made a distinct colony—a result due to fast-advancing prosperity on the part of the sheep-farming population, attracted by the unrivalled expanse of

pasture land lying between the course of the river Murray and the shore of Port Phillip. The site of Melbourne, its capital, was occupied, down to 1837, only by the emu and the kangaroo, with a few of the native "black fellows." The rapid growth of population in Victoria—now first in rank, in point of population and wealth, amongst the Australian settlements—is due mainly to the richness of its gold-fields, unrivalled in value of produce, except by those of California. Immediately prior to the working of its gold-fields, Melbourne had 23,000 inhabitants. These had increased, within a very few years, to 100,000, and at the present time reach (suburban districts included) nearly double that number.

QUEENSLAND—the nucleus of which was the Moreton Bay District—did not become a distinct province until 1859. Its chief resources are found in its vast expanse of pastoral area. The foundation of Brisbane, the colonial capital, dates from 1824.

WESTERN AUSTRALIA, under which name a third part of the Australian mainland (all that lies to the west of the 129th meridian) is included, dates its origin as a settlement from 1829, in which year the lands on the immediate banks of the Swan River were first settled, by emigrants from Britain. It is still to the south-western corner of the continent—the tract within which Swan River and (on the south coast) King George Sound are included—that the actual occupation of its vast area is confined.

SOUTH AUSTRALIA—a distinct colony from the beginning, and the only one among the Australian colonies to which convict-usage, on the part of the parent country, has never been applied—was first planted in 1836, under the auspices of an association formed in England for the purpose. Its assured prosperity was due, in the first instance, rather to its valuable copper-ores than to its agricultural capabilities, although these latter (as well as its suitability over vast

areas for sheep and cattle farming) have become more and more recognised with lapse of years. The large original area of the province was more than doubled by the provisional annexation, in 1863, of the vast tract of country, stretching from the 26th parallel northward to the ocean, through which McDoual Stuart had for the first time found a way, traversing the continent from its southern to its northern waters. It is across the vast extent of two thousand miles, between Adelaide and Port Darwin, that the enterprise of the South Australian colonists has, within a recent date, carried the wires of the electric telegraph—the first (and hitherto the only) means of telegraphic communication between Britain and her colonies at the antipodes. The shores of Port Darwin, on the coast of this "Northern Territory" of South Australia, are at the present time the locality of permanent settlement.

NEW ZEALAND, one of the most flourishing members of Britain's empire in the south, lies a thousand miles to the eastward of Australia, and is altogether distinct, in outline, physical aspect, climate, and resources, from that region. It was first seen by the Dutch navigator, Tasman, in his voyage of 1642, and the name of Staten Land—afterwards changed to its present appellation—bestowed upon it. The intercourse which Tasman sought to hold with its native inhabitants had a fatal and most inauspicious end, a boat's crew of the Dutch sailors becoming the victims of Maori ferocity, in the locality hence known as Massacre Bay (since changed to Golden Bay). From this date New Zealand remained unvisited until Cook, in his voyage of 1768, already referred to, fell in with its eastern coast-line, and examined with care various portions of its wide-stretching shores.

Cook's visit to this region was repeated on several subsequent occasions, and the coasts of New Zealand became the occasional resort of whalers, escaped convicts, mis-

sionary labourers, and others who frequented that portion of the Pacific. No attempt at regular colonisation was made until the year 1839, when the lands purchased of its native chiefs at the Bay of Islands, Port Nicholson, and other places (chiefly upon the North Island) became the abode of settlers from Britain, under the auspices of the "New Zealand Company." In the following year the sovereignty of Britain over the entire group of islands was formally proclaimed — Auckland being made the Government capital. The seat of government has since (1865) been removed to Wellington.

The settlements made, at various dates subsequent to 1840, on different parts of the New Zealand shores, together form a single colony, with Wellington as its capital. Each of the nine provinces of which the colony consists has a distinct provincial administration, and is represented in a common legislature, sitting at Wellington. Of these provinces four belong to the North, five to the South Island. The former are—Wellington, Auckland, Hawke Bay (with the town of Napier), and Taranaki (chief town, New Plymouth). The provinces of the South Island are —Nelson, Marlborough (chief town, Blenheim), Canterbury (chief town, Christchurch), Westland (chief town, Hokitika), and Otago (chief town, Dunedin).

The South African possessions of Britain consist of two distinct colonies, both on the African mainland—viz., the Cape Colony and Natal.

The CAPE COLONY, which derives its distinguishing name from the famous headland seen by Diaz in 1487, and rounded by Da Gama ten years later, comprehends the large area lying south of the Orange river—more than double the size of Britain. The Dutch were the first to plant a settlement in this region, though two of the captains in the service of the English East India Company had issued a proclamation from Saldanha Bay taking possession

of the territory in the name of the then English king, in 1620. It was thirty years later (1650) that the Dutch laid the foundation of Cape Town, and commenced permanent settlement in the territory, chiefly with a view, it would seem, to the facilities it afforded as an intermediate station on the route to the Indies. The colony planted by the Dutch remained in their hands until 1795, when it fell into the hands of the English, Cape Town being captured by a naval squadron. It was restored to Holland by the peace of Amiens (1802), but again taken, by forcible means, into British hands in 1806, since which date it has been retained under British sovereignty—the transfer from Dutch rule having been finally arranged by the terms of the Congress of Vienna. The limits of the original province underwent a vast extension in 1847, upon the termination of a prolonged period of Caffre warfare. Much more recently, in 1871, the tract of country hitherto known as Griqualand West (adjoining the right bank of the Orange, and including the lower portion of the Vaal or Ky Gariep) has been annexed to the colony. This was immediately consequent upon the attractions exerted by the diamond-fields, then of recent discovery, within that locality. Basuto Land, a tract lying farther to the eastward, and within which is the upper portion of the Orange, or Nu Gariep, was proclaimed British territory in 1858, and formally annexed in 1871.

NATAL, to the north-eastward of the Cape, was originally planted by emigrant *boers*, or Dutch farmers, from that province, under the promptings of dislike to British rule, in 1836. Their attempt to establish an independent republic in such near proximity was followed by a hostile attack on the part of the British authorities at the Cape. The *boers* were compelled to seek a refuge in the more distant interior, behind the chain of the Drakenberg, and the sovereignty of Britain over the Natal territory was established in 1841. Natal remained a dependent province

of the Cape until 1856, when it was made a distinct colony.

The following Table gives a succinct view of the British possessions throughout the globe:—

	Area in Eng. sq. miles	Population.
In Europe.		
British Islands (in 1871):		
England and Wales	58,320	22,704,000
Scotland	30,084	3,358,000
Ireland	32,513	5,402,000
Isle of Man and Channel Islands	313	144,000
Heligoland	1	2,000
Gibraltar	2	25,000
Malta and Gozo	122	150,000
In Asia.		
British India:		
Bengal	246,785	66,524,000
North-West Provinces	84,982	30,780,000
Punjaub	100,441	17,600,000
Madras	141,746	31,300,000
Bombay (with Sinde)	142,042	15,780,000
Oude	22,456	11,200,000
Central Provinces	79,600	7,985,000
British Burmah	90,070	2,463,000
Coorg, with parts of Hyderabad, and Mysore	47,116	6,618,000
Native States under British control	646,147	46,000,000
Straits Settlements	1,575	308,000
Ceylon	25,742	2,400,000
Andaman and Nicobar Islands	3,276	14,600
Aden	9	30,000
Hong Kong	30	125,000
Labuan	26	5,000
In Africa.		
Western Africa:		
Gambia	21	14,000
Sierra Leone	468	55,000
Gold Coast (including Lagos)	20,000	500,000

TABLE OF BRITISH POSSESSIONS (*continued*):

	Area in Eng. sq. miles.	Population.
IN AFRICA (*continued*).		
Cape Colony (Cape of Good Hope)	200,000	577,000
Natal	22,000	290,000
Ascension	34	*500*
St. Helena	47	6,000
Mauritius and its dependencies	864	322,000
IN AMERICA.		
Canada, Dominion of:		
Ontario (Upper Canada)	121,260	1,655,000
Quebec (Lower Canada)	210,040	1,226,000
New Brunswick	27,700	286,000
Nova Scotia	18,725	388,000
Prince Edward Island	2,173	94,000
Manitoba	14,000	12,000
British Columbia	213,000	42,000
North-West (Hudson Bay) Territory	2,750,000	100,000
Newfoundland	36,000	146,000
West Indies (including Honduras)	27,313	1,090,000
British Guiana	76,000	193,000
Bermuda Islands	22	12,000
Falkland Islands	6,000	800
IN AUSTRALIA AND POLYNESIA.		
New South Wales	310,000	519,000
Queensland	670,000	125,000
Victoria	90,000	760,000
South Australia (including Northern Territory)	900,000	189,000
Western Australia	980,000	25,000
Tasmania	26,000	103,000
New Zealand	99,500	300,000
SUMMARY, IN ROUND NUMBERS.		
British Islands	120,917	31,000,000
Colonies and dependencies in Europe	438	300,000
Do. do. Asia	1,502,424	200,000,000
Do. do. Africa	231,877	1,265,000
Do. do. America	3,281,240	4,835,000
Do. do. Australia, &c.	3,075,700	2,000,000
Total BRITISH EMPIRE	8,212,596	239,400,000

CHAPTER XIV.

ENGLAND IN THE NINETEENTH CENTURY.

DIVISION INTO COUNTIES.—England is divided into 40 counties, Wales into 12 counties—making in the whole 52. These may be arranged, for the purpose of geographical description, under nine divisions, in the following manner:—

I. SOUTH MIDLAND COUNTIES, *eight* in number, consisting of Middlesex, Hertford, Buckingham, Oxford, Northampton, Huntingdon, Bedford, and Cambridge.

II. NORTH MIDLAND, *five*, consisting of Leicester, Rutland, Nottingham, Derby, and Chester.

III. WEST MIDLAND, *seven*, consisting of Stafford, Warwick, Worcester, Shropshire, Hereford, Monmouth, and Gloucester.

IV. NORTHERN, *six*, consisting of Northumberland, Durham, York, Cumberland, Westmoreland, and Lancaster.

V. EASTERN, *four*, consisting of Lincoln, Norfolk, Suffolk, and Essex.

VI. SOUTH-EASTERN, *five*, consisting of Surrey, Kent, Sussex, Hampshire, and Berkshire.

VII. SOUTH-WESTERN, *five*, consisting of Wilts, Dorset, Somerset, Devon, and Cornwall.

VIII. NORTH WALES, *six*, consisting of Anglesey, Caernarvon, Denbigh, Flint, Merioneth, and Montgomery.

IX. SOUTH WALES, *six*, consisting of Cardigan, Radnor,

Brecknock, Glamorgan, Caermarthen, and Pembroke.*

POPULATION. — The total population of the British islands, in 1871 (according to the census taken in that year), amounted to 31,628,338 persons, of which England and Wales contained upwards of 22,712,000. The distribution between the different parts of the United Kingdom was as follows: —

ENGLAND AND WALES	22,712,266
SCOTLAND	3,360,018
IRELAND	5,411,416
Islands in the British Seas (Man, &c.)	144,638
Total	31,628,338

The following Tables show the areas of the different counties of England and Wales (in English square miles), the population of each, and the proportionate number of inhabitants to the square mile: —

ENGLAND.

Counties.	Area	Pop. in 1871	No. of inhab. to sq. m.
Bedfordshire	462	146,257	316
Berkshire	705	196,475	278
Buckinghamshire	730	175,879	241
Cambridgeshire	819	186,906	228
Cheshire	1,105	561,201	508
Cornwall	1,365	362,343	265

* This division coincides, for the most part, with that adopted by the Census Commissioners — the chief exceptions being in the cases of Yorkshire, Lancashire, Cheshire, Monmouthshire, and those portions of Middlesex and the adjacent country which are comprehended within the metropolis. In the census returns, London is treated as a distinct division; the county of York forms also a division of itself: Cheshire and Lancashire together constitute a distinct division (distinguished as North-Western): and Monmouth is classed with South Wales. Eleven divisions are thus formed. But for educational uses, it seems difficult to deviate from the established treatment of York and Lancaster as belonging to the northern counties — six in number.

Counties.	Area	Pop. in 1871	No. of inhab. to sq. m.
Cumberland	1,564	220,253	141
Derbyshire	1,029	379,394	368
Devonshire	2,589	601,374	232
Dorsetshire	988	195.537	198
Durham	973	685,089	704
Essex	1,657	466,436	281
Gloucestershire	1,258	534,640	425
Hampshire	1,672	544,684	325
Herefordshire	836	125,370	150
Hertfordshire	611	192,226	314
Huntingdonshire	361	63,708	176
Kent	1,627	848,294	521
Lancashire	1,905	2,819,495	1,585
Leicestershire	804	269,311	334
Lincolnshire	2,776	436,599	159
Middlesex	282	2,539,765	9,006
Monmouthshire	576	195,448	339
Norfolk	2,116	438,656	207
Northamptonshire	985	243,891	247
Northumberland	1,952	386,646	198
Nottinghamshire	822	319,758	389
Oxfordshire	739	177,975	240
Rutland	150	22,073	147
Shropshire	1,291	248,111	192
Somerset	1,636	463,483	283
Staffordshire	1,138	858,326	754
Suffolk	1,481	348,869	235
Surrey	748	1,091,635	1,459
Sussex	1,458	417,456	286
Warwickshire	881	634,189	719
Westmoreland	758	65,010	85
Wiltshire	1,352	257,177	190
Worcestershire	738	338,837	459
Yorkshire*	5,983	2,436,355	407

* The three divisions of Yorkshire exhibit the following results:—

Yorkshire.	Sq. m.	Pop.	Inhab. to sq. m.
East Riding	1,200	268,466	223
North do.	2,114	293,278	138
West do.	2,669	1,874,611	702

WALES.

Counties	Area	Pop. in 1871	No. of inhab. to sq. m.
Anglesey	302	51,040	167
Brecknockshire	719	59,901	83
Caermarthenshire	947	115,710	122
Caernarvonshire	579	106,121	183
Cardiganshire	693	73,441	106
Denbighshire	603	105,102	174
Flintshire	289	76,312	264
Glamorganshire	855	397,859	465
Merionethshire	602	46,598	77
Montgomeryshire	755	67,623	89
Pembrokeshire	628	91,998	146
Radnorshire	425	25,430	59

These Tables show how unequally the population is distributed over the surface of the country. The average number of persons to a square mile is 389 for the whole of England and Wales, and 422 for England only. But the distribution through the different counties ranges from 59 persons to a square mile (Radnorshire), to 9,006 persons within a like extent of surface (Middlesex). In England alone, Westmoreland and Middlesex present the vast difference between 85 persons, and upwards of 9,000 persons, to the square mile. The most populous county of Wales (Glamorgan) has 465 persons to the square mile,—nearly the same as that of the county of Worcester.

If we arrange the counties of England in the order of their respective density of population, we find the following results :—

	Inhab. to sq. m.		Inhab. to sq. m.
Middlesex	9,006	Durham	704
Lancashire	1,585	Yorkshire (West Riding)	702
Surrey	1,459	Kent	521
Staffordshire	754	Cheshire	508
Warwickshire	719	Worcestershire	459

	Inhab. to sq. m.		Inhab. to sq. m.
Gloucestershire	425	Suffolk	235
Nottinghamshire	389	Devonshire	232
Derbyshire	368	Cambridgeshire	228
Monmouthshire	339	Yorkshire (East Riding)	223
Leicestershire	334	Norfolk	207
Hampshire	325	Dorsetshire	198
Bedfordshire	316	Northumberland	198
Hertfordshire	314	Shropshire	192
Sussex	286	Wiltshire	190
Somerset	283	Huntingdonshire	176
Essex	281	Lincolnshire	159
Berkshire	278	Herefordshire	150
Cornwall	265	Rutland	147
Northamptonshire	247	Cumberland	141
Buckinghamshire	241	Yorkshire (North Riding)	138
Oxfordshire	240	Westmoreland	85

An examination of the respective order in which the counties stand in this list illustrates many of the truths of physical geography taught in a preceding chapter.* This is true alike in respect of the superficial aspect which different parts of the country exhibit, and in respect of what is beneath the surface. Those counties which possess a generally elevated and rugged surface have a low average of population. Westmoreland and Cumberland — the least populous of the English counties — supply an obvious instance. The North Riding of Yorkshire (which, beside a large section of the Pennine Chain, includes the tract of the North York Moors)† has an average even lower than that of Cumberland.

Cornwall, though possessing a rugged interior, besides its abundant mineral wealth, has, from its peninsular shape, a more extended line of sea-coast than any other county, and its average of population is accordingly very much higher than that of the mountain regions in the extreme north, though low as compared with many other parts of the kingdom, and even as compared with the average of the country at large.

The distribution of minerals, however, and the facilities

* Chap. ii.

† See *ante*, p. 29.

afforded for the prosecution of manufacturing industry, more than anything else, have determined the localities of man's resort in large and increasing numbers. It is this that has caused tracts of country, which in an early stage of society preserved an aspect that was strictly rural, to become covered with large towns and busy manufacturing villages, and to be alive with all the varied appliances that denote the application of human industry to the supply of the increasing wants of modern civilisation.

The metropolitan counties—from the various causes, social and political, which draw large numbers to the capital of every state—naturally exhibit the extremest density of population. Putting out of view, however, Middlesex and Surrey,* the above Table shows the coincidence of large populations with the geographical distribution of mineral wealth, and especially of coal. Lancashire, Stafford, Warwick, the West Riding, Durham, Cheshire, Worcester, Gloucester, Nottingham, Derby, Monmouth, Leicester—amongst the most densely populated of the counties—all include portions, more or less extensive, of the coal-fields enumerated in a preceding page. It may even be said that (with the exception of Middlesex, Surrey, and Kent) no county which lies altogether beyond the limits of a coal-field has so many as 300 persons to a square mile. The only one of the Welsh counties that exceeds 300 in the average density of its population (Glamorgan) includes the larger portion of the coal-field of South Wales. Not only is coal worked within the counties which take the high numerical rank in our Table, but iron (for reasons adverted to elsewhere) is most extensively made in the same parts of the country.†

* It is only the eastern division of Surrey, within which a considerable portion of the metropolis falls, that has a high ratio of population. West Surrey is strictly agricultural, and has an average of population not greater than that of the agricultural counties in general. The high average of Kent is partly due to the fact that it includes a portion of the metropolis. Kent has, besides, an unusually large number of maritime towns.

† See *ante*, p. 63.

The coincidence of density of population with the districts which include the great national manufactures is even more obvious. In truth, the two conditions — of mineral wealth, and manufacturing industry — stand in the relationship of cause and effect, man's intelligence and ingenuity being the connecting medium. The metropolis of Britain is the vastest aggregate at once of manufacturing and of commercial industry that the world exhibits. Lancashire and Cheshire include the great seats of the cotton manufacture: the West Riding of York, those of the woollen trade: the counties of Stafford, Warwick, Worcester, and South Wales, those of the trade in iron and hardware goods in general.

Some qualification is necessary to a due appreciation of the truth which the above Table indicates in regard to the distribution of population and national industry. In several instances, particular portions of a county have a density of population either very greatly in excess of, or very considerably below, the average of the same county as a whole. The district of Furness, which forms the extreme northern portion of Lancashire, belongs physically to the mountain region of Cumberland and Westmoreland, and, like those counties, is scantily populated. The southern division of Lancashire, on the contrary, has a density of population which greatly exceeds that of the county as a whole. Northumberland occupies, in the list of counties arranged according to density of population, a low place, its average being only 198 to the square mile: but the tract adjoining the banks of the Tyne, in the south-eastern corner of Northumberland, and within the limits of the Newcastle coal-field, is one of the most densely populated portions of England.

Again, large portions of Devon and Cornwall, comprehending Dartmoor and the adjoining high grounds in the former county, and the bleak moorlands which occupy the interior of the latter, have an exceedingly scanty population. Nine-tenths of the inhabitants are collected within the nume-

rous towns and villages that line the coast. In many parts of the interior there are only a few scattered residents gathered round the shaft of a mine.

The general distribution of the population is further illustrated by noting the average density shown by each of the great divisions into which we have grouped the counties. Thus —

Divisions of England and Wales	Total Area	Total Population	No. of inhab. to sq. m.
I. South Midland Counties (excluding Middlesex).	4,707	1,186,842	252*
II. North Midland Counties .	3,910	1,551,737	397
III. West Midland Counties .	6,718	2,934,921	437
IV. Northern Counties .	13,135	6,612,848	504
V. Eastern Counties . . .	8,030	1,690,560	210
VI. South-Eastern Counties (excluding Surrey)	5,462	2,006,909	367
VII. South-Western Counties .	7,930	1,879,914	237
VIII. North Wales	3,130	452,796	144
IX. South Wales	4,267	764,330	179

It hence appears that the Northern Counties have, on the whole, a much higher average of population than the other divisions of the kingdom. They include, besides, a greater numerical population than any other division, the metropolitan counties alone excepted. Nearly a third of the population of England is found to the northward of a line drawn between the estuaries of the Mersey and the Humber. The coal-fields of South Lancashire, the West Riding, and the tract between the lower courses of the Tees and the Tyne, with the numerous busy seats of industry that have grown into existence within those localities, at once account for the fact. The Eastern Divi-

* If the population of Middlesex be included, the average density of the south-midland division is raised to 747 persons to the square mile. Similarly, the south-eastern division, with the inclusion of Surrey, exhibits an average of 499. But the metropolitan counties offer an obvious exception to the rest of the kingdom in such respects.

sion, which is almost exclusively agricultural, exhibits a lower average than any other portion of England.

The great seats of population, within England, are— 1. the Metropolis; 2. the country adjacent to Manchester and Liverpool, in South Lancashire and the neighbouring parts of Cheshire; 3. the tract adjoining Leeds and Bradford, in the West Riding of Yorkshire; 4. the district which comprehends the lower courses of the rivers Tyne, Wear, and Tees, within Durham and the adjoining portion of Northumberland; and, 5. the country around Birmingham, Wolverhampton, and Dudley, within South Staffordshire and the adjacent portions of Warwickshire and Worcestershire.

The average density of population, at the present time, is greater in the case of England than in any country on the globe, with the single exception of Belgium.*

The total populations of England and Wales respectively, at succeeding intervals of ten years during the present century, with their progressive growth between each interval, are shown in the following Table:—

Years	England	Increase per cent.	Wales	Increase per cent.	England and Wales	Increase per cent.
1801	8,350,859	—	541,677	—	8.892.536	—
1811	9,553,021	14·4	611,235	13	10,164,256	14
1821	11,281,883	18	718,353	17·5	12,000,236	18
1831	13,090,523	16·3	806,274	12	13,896,797	16
1841	14,997.427	14·5	911,705	13	15,914,148	14·5
1851	16,921,888	13	1,005,721	10·3	17,927,609	12·6
1861	18,954,444	12	1,111,780	10·5	20,066,224	11·9
1871	21,495,131	13·4	1,217,135	9·5	22,712,266	13·2

The population of England and Wales became nearly doubled within the first half of the century (1801—1851),

* England, as we have seen above, has 422 persons to the square mile, on the average of the whole country. Belgium has 442 persons to the square mile. The population of China hardly exceeds 300 to the square mile, even if we allow 412,000,000—the highest estimate that has been given—as the number of its inhabitants.

and upwards of 2,600,000 were added to its numbers within the ten years between 1861 and 1871. The rate of increase has not been uniform, in regard either to time or locality. Population increased faster during the first thirty years of the century than during the later thirty years.* Some districts exhibit an increase greatly in excess of that proper to the country as a whole, while other districts fall below the average ratio. Again, some districts exhibit an actual diminution in numbers within the period between two successive censuses.

This inequality in the ratio of increase has been strongly marked within recent years. It is due to causes which have been long in operation, and which have become increasingly manifest with the growth and developement of the manufacturing system during the present century. The manufacturing portions of the country increase in number of inhabitants much faster than the agricultural portions, and the town populations gain at the expense of the rural districts. That is, the populations of the towns, besides their natural increase, are continually added to by the absorption of those who (from whatever cause) become drawn away from the pursuits of rural industry.

During the ten years between 1851 and 1861, five of the English counties—Cambridge, Norfolk, Rutland, Suffolk, and Wiltshire; with two Welsh counties—Anglesey and Montgomery, actually declined in population.† Between 1861 and 1871, the only counties that actually declined in number of inhabitants were Cornwall and Huntingdon, in England, with Anglesey and Brecknock, in Wales. The manufacturing and mining counties, on the other hand, exhibit an increase which is surprisingly great. The ratio

* In the former period (1801—1831) the actual increase in the population of England was 4,895,800, and the rate was 53 per cent.: in the thirty years ending 1861, the numerical increase was 6,171,760, equivalent to 44 per cent.

† The districts which have thus fallen off are almost exclusively agricultural. Those districts which comprise the great seats of manufacturing, mining, or commercial industry, exhibit the greatest increase —in some instances to an extent previously unparalleled.

of increase, for the whole of England and Wales, between the years 1861 and 1871, was upwards of 13 per cent.; but during that period the population of Durham increased in the ratio of 34 per cent.; that of Surrey, 30 per cent.; of Glamorganshire, above 25 per cent.; and of the West Riding, above 21 per cent. The increase for the whole of Yorkshire, during the same interval, was equal to nearly 19 per cent. Middlesex, Kent, Essex, and Stafford, showed an increase of 15 per cent.

Even in the case of those counties which, on comparison of 1861 with 1851, exhibit a decrease in the total number of their inhabitants; the larger towns show, in most cases, a numerical increase—a fact which illustrates in a most striking manner the tendency of the population to become, with each succeeding decade, more and more commercial and manufacturing, in place of devotion to agricultural pursuits. Thus, the city of Norwich had about 6,000 more inhabitants in 1861 than in 1851, though the whole population of Norfolk was 7,290 fewer in the later than in the earlier period. Similarly, although the population of Suffolk underwent within the same period a diminution of nearly a thousand persons, yet the town of Ipswich added above 5,000 to its numbers. In Wiltshire, again, the towns of Salisbury and Devizes exhibit a small numerical increase, although the population of the county underwent a considerable diminution on the whole.

The following Tables show the Parliamentary representation of England and Wales:—

COUNTIES OF ENGLAND AND WALES, WITH NUMBER OF MEMBERS RETURNED FOR EACH.

Bedfordshire	2	Cornwall:	
Berkshire	3	East	2
Buckinghamshire	3	West	2
Cambridgeshire	3	Cumberland:	
Cheshire:		East	2
North	2	West	2
Mid	2	Derbyshire:	
South	2	North	2

Derbyshire:	
South	2
East	2
Devonshire:	
North	2
South	2
East	2
Dorsetshire	3
Durham:	
North	2
South	2
Essex:	
North-west	2
North-east	2
South	2
Gloucestershire:	
East	2
West	2
Hampshire:	
North	2
South	2
Isle of Wight	1
Herefordshire	3
Hertfordshire	3
Huntingdonshire	2
Kent:	
East	2
West	2
Mid	2
Lancashire:	
North	2
North-east	2
South-east	2
South-west	2
Leicestershire:	
North	2
South	2
Lincolnshire:	
North	2
Mid	2
South	2
Middlesex	2
Monmouthshire	2
Norfolk:	
West	2
North-east	2
South-east	2
Northamptonshire:	
North	2
Northamptonshire:	
South	2
Northumberland:	
North	2
South	2
Nottinghamshire:	
North	2
South	2
Oxfordshire	3
Rutland	2
Shropshire:	
North	2
South	2
Somersetshire:	
East	2
Mid	2
West	2
Staffordshire:	
North	2
West	2
East	2
Suffolk:	
East	2
West	2
Surrey:	
East	2
Mid	2
West	2
Sussex:	
East	2
West	2
Warwickshire:	
North	2
South	2
Westmoreland	2
Wiltshire:	
North	2
South	2
Worcestershire:	
East	2
West	2
Yorkshire:	
North Riding	2
East Riding	2
West Riding:	
(North)	2
(Mid)	2
(South)	2

WALES.

Anglesey	1	Flintshire	1
Brecknockshire	1	Glamorganshire	2
Caermarthenshire	2	Merionethshire	1
Caernarvonshire	1	Montgomeryshire	1
Cardiganshire	1	Pembrokeshire	1
Denbighshire	2	Radnorshire	1

Total County Members for England . . . 172
Ditto ditto Wales . . . 15

TOTAL 187

CITIES AND PARLIAMENTARY BOROUGHS IN ENGLAND AND WALES, WITH THE NUMBER OF MEMBERS RETURNED BY EACH.

Places returning more than Two Members.

London (City)	4	Liverpool	3	Leeds	3
Manchester	3	Birmingham	3		

Places returning Two Members each.

Aylesbury.	Exeter.	Nottingham.
Barnstaple.	Finsbury.	Oldham.
Bath.	Gloucester.	Oxford (city).
Bedford.	Grantham.	Do. (university).
Berwick-upon-Tweed.	Greenwich, &c.	Penrhyn and Falmouth.
Blackburn.	Hackney.	Peterborough.
Bolton.	Halifax.	Plymouth.
Boston.	Hastings.	Pontefract.
Bradford(Yorkshire).	Hereford.	Portsmouth.
Brighton.	Hull.	Preston.
Bristol.	Ipswich.	Reading.
Bury St. Edmunds.	King's Lynn.	Rochester.
Cambridge (town).	Lambeth.	Salford.
Do. (university).	Leicester.	Salisbury.
Canterbury.	Lincoln.	Sandwich.
Carlisle.	Macclesfield	Scarborough.
Chelsea.	Maidstone.	Sheffield.
Chester.	Marylebone.	Shoreham.
Colchester.	Merthyr-Tydvil.	Shrewsbury.
Coventry.	Newark.	Southampton.
Cricklade.	Newcastle-under-Lyme.	Southwark.
Derby.	Newcastle-upon-Tyne.	Stafford.
Devonport.	Northampton.	Stockport.
Dover.	Norwich.	Stoke-upon-Trent.
Durham.		Stroud.
East Retford.		

CITIES AND PARLIAMENTARY BOROUGHS IN ENGLAND AND WALES—*continued.*

Sunderland.	Truro.	Wigan.
Tamworth.	Warwick.	Winchester.
Taunton.	Wenlock.	Wolverhampton.
Tiverton.	Westminster.	Worcester.
Tower Hamlets.	Weymouth.	York.

Total of places returning Two Members each . . 90

Returning One Member each.

Abingdon.	Flint, &c.	Morpeth.
Andover.	Frome.	Newport (I. of Wight).
Ashton-under-Lyme.	Gateshead.	Northallerton.
Banbury.	Gravesend.	Pembroke, &c.
Beaumaris.	Great Grimsby.	Petersfield.
Bewdley.	Guildford.	Poole.
Birkenhead.	Hartlepool.	Radnor, &c.
Bodmin.	Harwich.	Richmond (Yorksh.).
Brecknock.	Haverfordwest, &c.	Ripon.
Bridgenorth.	Helston.	Rochdale.
Bridport.	Hertford.	Rye.
Buckingham.	Horsham.	St. Ives (Cornwall).
Burnley.	Huddersfield.	Shaftesbury.
Bury (Lancashire).	Huntingdon.	South Shields.
Caermarthen, &c.	Hythe.	Staleybridge.
Caernarvon, &c.	Kendal.	Stamford.
Calne.	Kidderminster.	Stockton.
Cardiff, &c.	Knaresborough.	Swansea, &c.
Cardigan.	Launceston.	Tavistock.
Chatham.	Leominster.	Tewkesbury.
Cheltenham.	Lewes.	Thirsk.
Chichester.	Lichfield.	Tynemouth.
Chippenham.	Liskeard.	Wakefield.
Christchurch.	London (university).	Wallingford.
Cirencester.	Ludlow	Walsall.
Clitheroe.	Lymington.	Wareham.
Cockermouth.	Maldon.	Warrington.
Darlington.	Malmesbury.	Wednesbury.
Denbigh, &c.	Malton.	Westbury.
Devizes.	Marlborough.	Whitby.
Dewsbury.	Marlow, Great.	Whitehaven.
Dorchester.	Middlesborough.	Wilton.
Droitwich.	Midhurst.	Windsor.
Dudley.	Monmouth, &c.	Woodstock.
Evesham.	Montgomery, &c.	Wycombe.
Eye.		

Total returning One Member each 106

SUMMARY: PARLIAMENTARY REPRESENTATION OF ENGLAND AND WALES.

(England.)

1	County (Yorkshire) returns 10 members	Total	10	
1	Do. (Lancashire) „ 8 do.	„	8	
10	Counties return 6 members each	„	60	
15	Do. „ 4 „	„	60	
7	Do. „ 3 „	„	21	
6	Do. „ 2 „	„	12	
1	Do. (I. of Wight) returns 1 member	„	1	
				172

(Wales.)

3	Counties return 2 members each	Total	6	
9	Do. „ 1 „	„	9	
				15
	Total number of County Members for England and Wales			187

1	City (London) returns 4 members	Total	4	
4	Cities and Boroughs return 3 members each	„	12	
88	Do. „ 2 „	„	176	
2	Universities return 2 members each	„	4	
105	Cities and Boroughs return 1 member each	„	105	
1	University (London) returns 1 member	„	1	
	Total of City, Borough, and University Members for England and Wales			302

Total County Members (England and Wales)			187
Do. City and Borough	„		297
Do. University Members			5
Total Parliamentary Representation of England and Wales			489

CHAPTER XV.

PHYSICAL GEOGRAPHY OF SCOTLAND.

AREA, COAST-LINE, ETC. — Scotland is the northwardly portion of Great Britain. It is bounded on the north and west by the Atlantic Ocean, on the east by the North Sea, on the south by England and part of the Irish Sea. The lower course of the Tweed, the Cheviot Hills, and the Solway Firth, mark in modern geography the limits between Scotland and England.

The figure of Scotland is exceedingly irregular. Its greatest dimensions are north and south, in which direction it measures about 270 miles. Its breadth is greater both in the southward and middle divisions of the country than farther north. Its dimensions in the direction of east and west are lessened by the firths and narrow salt-water estuaries (lochs) which indent the coast, and penetrate far into the body of the land. Between the opposite shores of the Firths of Forth and Clyde (nearly under the 56th parallel) the land is less than forty miles across from sea to sea; but its extreme dimensions east and west are more than three times that measure. Between the line of the Forth and Clyde and the parallel of the Moray Firth, the breadth of the Scotch mainland varies from 100 to upwards of 130 miles. This becomes reduced, northward of the Moray Firth, to an average of between forty and fifty miles.

The most northwardly point of the mainland of Scotland is Dunnet Head, in the county of Caithness: the most southward is the Mull of Galloway, in Wigtonshire. A straight line drawn between those points measures

288 miles. The most eastwardly point is Buchan Ness, in Aberdeenshire: the most westwardly is the point of Ardnamurchan, in the county of Argyle.

The superficial area of the Scotch mainland is reckoned at about 26,000 square miles. Its numerous islands are estimated to have a total of about 4,000 square miles. Adding these figures, the total area of Scotland amounts, in round numbers, to 30,000 square miles, or 7,770,000 hectares.

The coast line of Scotland, especially on its western side, is much more irregular than that of South Britain, and has hence a greater lineal developement. Including all its salt-water inlets and estuaries, the length of coast belonging to the Scotch mainland is probably not less than 2,500 miles. No part of the interior is distant so much as fifty miles from the sea in a direct line, and few parts are anything like so far.

The principal inlets of the Scotch coast are:—

On the east side (*from south to north*).

1. Firth of Forth
2. Firth of Tay
3. Moray Firth
4. Loch Beauley
5. Cromarty Firth
6. Keiss Bay.

Both Loch Beauley and the Firth of Cromarty are extensions of the upper portion of the Moray Firth.

On the north coast (*from east to west*).

1. Dunnet Bay
2. Kyle* of Tongue
3. Loch Eribol
4. Kyle of Durness.

On the west coast (*from north to south*).

1. Edderachylis Bay
2. Enard Bay
3. Loch Broom
4. Loch Ewe
5. Loch Torridon
6. Loch Carron
7. Loch Alsh
8. Loch Hourn
9. Loch Nevish
10. Loch Sunart
11. Loch Linnhe
12. Loch Eil
13. Loch Leven
14. Loch Etive
15. Loch Fyne
16. Firth of Clyde
17. Loch Ryan
18. Luce (or Glenluce) Bay
19. Wigton Bay
20. Solway Firth.

* Kyle, a term signifying a narrow channel or strait (caolas: *Gaelic*).

To the above enumeration of Scotch estuaries there require to be added the numerous firths and channels which divide its different islands, either from the mainland or from one another. Among the principal of these are:—

Pentland Firth,	between	Orkney Islands	and	N. coast of mainland	
The Minsh	„	Hebrides	„	W.	ditto
Little Minsh	„	Ditto	„	I. of Skye	
Sound of Sleat	„	Skye	„	W. coast of mainland	
Sound of Mull	„	I. of Mull	„	W.	ditto
Sound of Jura	„	I. of Jura	„	W.	ditto
Sound of Islay	„	Ditto	„	Islay	
Kyles of Bute	„	Bute	„	Coast of Argyle.	

The coasts of Scotland are for the most part bolder than those of South Britain; the headlands rise more abruptly above the water, and reach a superior altitude. This is especially the case upon the western coast, from Cape Wrath (the N.W. extremity of the mainland) southward to Loch Linnhe; and eastward from the same promontory towards Dunnet Head, upon the north side of the island. To the south of Loch Linnhe, round the peninsula of Cantire and the Firth of Clyde, the shores are generally low, and also between the Mull of Galloway and the head of the Solway Firth.

On the eastern side, the coast from Tarbet Ness, round the Murray Firth, to the high promontory of Buchan Ness, and thence southward to the mouth of the Dee, is generally low and sandy, excepting in some portions of small extent. In a part of this tract extending on both sides of the river Findhorn there are loose and shifting sands, which, combined with the action of the tide, have caused considerable changes in the line of coast. South of the river Dee, cliffs line a great part of the coast as far as the town of Arbroath (lat. 56° 33′). Thence round the Firth of Tay, the peninsula of Fife, and the Firth of Forth, the coast is generally flat, though the hills in some places approach very near the shore. A few miles before reaching St. Abbs Head, however, the coast again becomes high and rocky, and continues so thence to the mouth of the Tweed.

The long and narrow peninsula of Cantire * forms one of the most striking features of the western coast-line. It stretches upwards of forty miles in the direction of its length, but is nowhere more than eight miles across, and is contracted at its northern extremity (where the head waters of East and West Loch Tarbet make their nearest approach) to less than half a mile.

The narrow inlets of the Scotch coast bear close analogy to the fiords of the Norwegian shore, and, like them, are intimately connected with the geological conformation and physical aspect of the region to which they belong. The western coast of Scotland, within the highland region, exhibits a vast mountain-wall, the occasional depressions in which are filled by the waters of the adjacent ocean. The sea thus penetrates far into the interior, in some instances to upwards of thirty miles from the open waters. With few exceptions, the lochs of the western coast are throughout of this description. The bold and variously-indented shores of these lochs, protected from the open ocean, afford shelter to men and cattle against the fury of the Atlantic storms, and alone render this portion of the coast habitable.

CAPES.—Of the almost countless headlands which belong to the Scotch coasts, the following are among the most important: —

On the east coast (south to north).

	Height		Height
St. Abbs Head (Berwick)	224 feet	Kinnaird Head (Aberdeen)	120 feet
Fife Ness (Fife)		Burgh Head (Elgin)	
Button Ness (Forfar)		Tarbet Ness (Ross)	175 feet
Red Head (Forfar)	255 feet	Ord of Caithness (Caithness)	
Girdle Ness (Kincardine)	115 feet	Noss Head (Caithness)	
Buchan Ness (Aberdeen)	130 feet		

On the north coast (east to west).

	Height		Height
Duncansby Head (Caithness)	153 feet	Whiten Head (Sutherland)	517 ft.
Dunnet Head (do.)	346 feet	Far-out Head (do.)	330 feet
		Cape Wrath (do.)	400 feet

* That is, Ceantire — the "Land's End." (*Gaelic.*)

On the west coast (north to south).

	Height		Height
Storr Head (Sutherland)		Corsill, or Corsewall, Point (Wigton)	
Ardnamurchan Point (Argyle)	180 feet	Mull of Galloway (do.)	325 feet
Mull of Cantire (Argyle)	297 feet	Burrow Head (do.)	

SURFACE OF LAND. — Mountains, and high moorlands constitute by far the larger portion of Scotland, the surface of which is uniformly bolder, and in great measure of more rugged aspect, than is the case with South Britain.

The ancient and native division of Scotland is into the Highlands and the Lowlands. This does not correspond, in all cases, to the political divisions of the country, for several of the Scotch counties fall in part within the highland, and in part within the lowland, region. Still less do the terms Highland and Lowland express, in every case, the actual features of the tracts of country to which they are respectively applied. Many portions of the Lowlands are distinguished by strikingly bold features of surface, and portions of the Highlands, in the neighbourhood of the eastern coasts, are relatively lower than the mountainous parts of the so-called Lowland region. The distinction between Highland and Lowland Scotland, however, is fully justified by the contrasted aspects which belong, in a general sense, to the two regions so distinguished. It is, moreover, a distinction that is indelibly stamped upon the history of the country, as well as upon the land itself, and hence may with propriety be followed in sketching the chief features of its physical geography.

Speaking generally, the *Highlands* include the northern and western portions of Scotland: the *Lowlands*, its southern and eastern portions. The great natural division between the two regions is formed by a broad valley, or plain, which, with little interruption, extends across the country diagonally, in the direction of N.E. and S.W., from the shores of the North Sea to the estuary of the Clyde, below Dumbarton. This valley is known, within great part of its extent, as Strathmore, or the "great strath," and that

appellation may, for the sake of geographical description, be extended to it throughout.* The region lying north and west of Strathmore constitutes the Highlands: all those portions of Scotland that lie east and south of Strathmore belong to the Lowlands.

THE LOWLANDS.—1. What is called Lowland Scotland is by no means a level or low region. On the contrary, the Scotch lowlands embrace many elevated tracts of country, a great portion of them more or less covered with hills, some of which rise to considerable height. But the hills are of more rounded form, the valleys which divide them of greater breadth, and the adjoining plains of larger proportions, than is the case within the highland region.†

The Lowlands are divided into two portions — Northern and Southern — by a plain which extends between the firths of Clyde and Forth, upon opposite sides of the island. This plain is itself a remarkable feature in the physical geography of Scotland. Its higher portions are little more than two hundred feet above the level of the sea, and most parts of it are very considerably below that elevation. The country which extends thence to the borders of England belongs naturally to the same physical region as the northern portion of that country. It consists chiefly of upland plains, upon which there rise hills of considerable height.

The principal mass of the highlands of southern Scotland lies in an east and west direction. The Carrick Hills are included within the westwardly portion of this area; the Muirfoot and Lammermuir Hills, to the north of the Tweed, with, south of that river, the Cheviot Hills, belong to its more eastwardly division. Its greatest elevation is attained towards the central portion of the whole region, around the upper valleys of the Clyde and the Tweed. The summit of Broad Law, about twelve miles south-west of the town of Peebles, is 2,723 feet above the sea.

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* As a local designation, the name of Strathmore is limited to portions of the counties of Forfar and Perth.

† Throughout southern Scotland, the pastoral valleys that penetrate the higher grounds are distinguished by the term *dale*, as Tweedale, Teviotdale, Clydesdale, &c. The narrow valleys that intersect the highland region are uniformly distinguished as *glens*, as Glenmore, Glengarry, Glenshee, &c. The word *dale*, equivalent to the Scandinavian *daal* and the German *thal*, recalls the memory of the early settlements of the Northmen within that region (see *ante*, chap. v.). The word *strath*, applied to some valleys within the Highland border, is Celtic, and has its equivalent in the *ystrad* of the Welsh branch of the Celtic family. Within the region of Highland glens and rugged mountains, the Celtic population has maintained its place to the present day.

The high lands here, and around upper Clydesdale, spread out for many miles north and south, and consist of barren, bleak, and rounded masses, which present to appearance a confused heap of rugged mountain tops. Several high summits occur along the principal line of watershed, at the head of the tributary valleys which belong to the Tweed basin. Hart Fell, at the head of Tweedale, is 2,651 feet above the sea. Ettrick Pen, farther to the eastward, 2,269 feet. Queensberry Hill, near the source of the Clyde, is 2,285 feet, and the highest point of Tinto Hill (farther to the northward, in the angle between the Clyde and its tributary the Douglas), 2,335 feet. The village of Leadhills, near the borders of Lanark and Dumfries, and on the west side of upper Clydesdale, is 1,280 feet above the sea, and is said to be the highest inhabited place in Britain.

West and south-west of the line of watershed, an elevated region, of irregular surface, reaches nearly to the shores of the Irish Sea and the North Channel. No continuous mountain ridge can be traced, but numerous high masses occur. Among the latter are Black Larg (at the point of junction of the three counties of Ayr, Dumfries, and Kirkcudbright), 2,231 feet; the Rhinns of Kells (above the head of Loch Doon) reach 2,668 feet; Merrick, farther to the south-west, is 2,764 feet. Criffell, near the outlet of the Nith, is 1,867 feet.

The high ground which divides the upper valleys of the Clyde and Tweed is connected with the range of the Pentland Hills, which extend from the neighbourhood of Edinburgh in a general south-west direction. The highest of the Pentland Hills is 1,860 feet above the sea: Arthur's Seat, adjacent to Edinburgh, is 822 feet, and the rock upon which Edinburgh Castle is built, 434 feet.

From the southern part of the Pentland Hills, a range of high land runs eastward to the coast at St. Abbs Head, and separates the basin of the middle and lower Tweed from the valley of the Tyne (of Haddington). The western portion of this range is called the Muirfoot Hills—the eastern and wider portion, the Lammermuir Hills. The highest of the Muirfoot Hills is 2,136 feet; in the Lammermuir, Meikle Says Law, the highest summit, is 1,750 feet, and several others are of nearly equal elevation. The highest parts of the Lammermuir are chiefly moss or moor land.

The principal *plains* in this portion of Scotland, besides that which stretches between the estuaries of the Clyde and Forth, are the lower portion of Clydesdale,—the plain of Ayrshire, which forms a kind of amphitheatre, enclosed by hills on three sides,—the narrow plain along the shores of the Solway Firth,—the lower part of the valley of the Tweed,—and the valley of the small river Tyne (of Haddington). Among the pastoral valleys which penetrate the

mountain region are Tweedale, Teviotdale, and Lauderdale, belonging to the basin of the Tweed,—and Liddisdale, Eskdale, Annandale, and Nithsdale, sloping towards the Solway Firth.

2. The more northwardly division of the Lowland region extends along the eastern side of Scotland, from the Firth of Forth northwards. It includes Strathmore, and also two hilly regions which intervene between Strathmore and the waters of the North Sea. These tracts of high ground are the Ochill Hills and the Sidlaw Hills — the former between the Firths of Forth and Tay, the latter to the northward of the Firth of Tay.

Strathmore—"the great strath"—extends without interruption from the immediate neighbourhood of Stonehaven (on the coast of Kincardine), in the direction of south-west, to the banks of the Forth, above Stirling, a total length of nearly ninety miles. Its breadth varies from 16 miles in its widest part (along the course of the Forth) to less than a mile at its northern extremity, where it is terminated by the close approach of the Grampian range to the waters of the North Sea. Strathmore exhibits the most continuous extent of level and cultivable land in Scotland. Throughout its length there is scarcely any eminence to obstruct the view. The greater portion of this plain is under cultivation. A low range of heights, called the Campsie Fells, intervenes between the valley of the Forth, in the neighbourhood of Stirling, and that of the Clyde, about Dumbarton. Their highest elevations are 1,500 feet.

The *Sidlaw Hills* commence in the neighbourhood of Perth, and extend thence in a north-east direction; their highest elevations are about 1,400 feet. They terminate by a rapid declivity on the side of Strathmore, but descend by a succession of terraces towards the North Sea. South of the Sidlaw Hills, along the Firth of Tay, is the Carse of Gowrie, one of the most fertile tracts in Scotland.

The *Ochill Hills*, with their offsets and outlying branches, occupy the greater part of the peninsula of Fife, and exhibit some masses of considerable elevation. Ben Cleuch (5 miles north by east of Alloa) is 2,359 feet above the sea, and the highest of the Lomond Hills, to the north-east of Loch Leven, 1,280 feet. The hills in general leave a narrow belt of lowland round the shores of the peninsula.

The Highlands.—The Highlands comprehend the widest portion of Scotland, stretching (under the line of the 57th parallel) across the whole breadth of the country, from the North Sea on one side to the Atlantic Ocean on the other. The greater part of this extensive mass of high ground is filled by the Grampians and their connected heights. A deep and narrow valley divides the highland region into

two portions: this valley is called *Glen-more*, or the great glen. The general direction of Glenmore is from north-east to south-west; it extends entirely across Scotland, from the head of the Moray Firth to Loch Linnhe, and furnishes (in part by artificial means) a water-communication between the opposite shores of the island.

Glenmore forms the most marked and singular feature in the physical conformation of Britain. Its entire length, from Fort George at the head of the Murray Firth, on the north-east, to the entrance of Loch Linnhe, on the south-west, is about 100 miles. The north-eastern extremity of the glen is occupied by the waters of Loch Beauley and the strait which unites it to the Murray Firth; its south-western extremity by Loch Linnhe, and its northward prolongation, Loch Eil. In the middle portion of the glen are three long and narrow lakes, Loch Ness, Loch Oich, and Loch Lochie: the largest of these is Loch Ness, which discharges itself by the river Ness into the Beauley Loch. The Caledonian Canal connects all these lakes by navigable channels.

The extensive tract of country which stretches between Glenmore and Strathmore includes by far the larger portion of the highlands. More than three-fourths of this area constitute a high mountain-region, a large portion of which is upwards of a thousand feet above the sea. Upon this elevated base rise the highest mountains in the British Islands.

The Grampian Mountains measure nearly 100 miles in length, from east to west, and their higher summits have an average elevation of from 2,000 to 3,000 feet above the sea. At the western extremity of the chain, near the shores of Loch Linnhe, is Ben Nevis, a huge mass, the summit of which rises to 4,406 feet above the sea: this is the highest mountain in Scotland, and the culminating point of the British Islands. The Cairngorm Mountains, an outlying group of the Grampian system (situated to the northward of the main range, near the head of the valley of the Dee), contain some summits which are little inferior in altitude; Ben Mac Dhui, in this group, is 4,295 feet above the sea-level, and the top of Cairngorm exceeds 4,000 feet in height.*

Upon the north side of the Grampians is a high and mountainous tract which extends nearly to the shores of the North Sea and the

* The Grampians do not rise to the height of perpetual congelation (which in their latitude would be about 1,50 feet above the elevation of their highest summits). But in the dark recesses of the Cairngorm group the snow sometimes remains all the year round, and the surface of Loch Avon — a small lake situated in the heart of this high and desolate region, at an elevation of 1,750 feet, and overhung by the precipitous sides of the mountains — has no sunshine for several of the winter months.

Moray Firth — diminishing, however, in elevation as it approaches the coast, near which the valleys of the rivers (or *straths*) widen out into plains of limited extent. The high ground which extends immediately to the north of the Cairngorm group, along the eastern side of Strath Spey, is distinguished as the Braes of Abernethy, a large portion of which is covered with magnificent pine forests. On the west side of the Spey is a continuous range (not, however, connected with the central chain) called the Monadh Leadh Mountains, the higher portions of which are about 2,000 feet above the sea.

From Ben Nevis, a succession of high mountain-masses extend southward to the shores of the Firth of Clyde: these are sometimes distinguished as the Southern Grampians. They do not form any continuous range, but contain huge masses of great extent and considerable height. Amongst them is Ben Cruachan (near the northern extremity of Loch Awe), which is 20 miles in circumference and 3,670 feet in elevation. High mountains line the western side of Loch Long, and extend through the peninsula between that lake and Loch Fyne, down to the shores of the narrow channel which separates the island of Bute from the mainland.

The country to the east of this southward extension of the Grampians, and to the south of the principal chain, contains numerous high summits — among which are Ben Lomond (on the east side of the lake of that name), 3,191 feet — Ben More (on the south of Loch Dochart, in the south-west extremity of Perthshire), 3,818 feet — Ben Lawers (on the west side of Loch Tay), 3,984 feet — and Schehallion (north-east of the latter-named mountain), 3,533 feet above the sea.

A large portion of the mountain region above described consists of high and naked moors, lying at an elevation of probably not less than 1,000 feet above the sea. One of the most extensive of such tracts is the Moor of Rannoch, which stretches to the west and south of the loch of that name, and the surface of which presents an open and nearly level plain, covered by an immense bog, which produces no vegetation of any kind, except on the immediate banks of Loch Lydoch, round which are a few fir-trees. To the north of this desolate region is a tract of equally sterile character, lying between Ben Nevis and the shores of Loch Ericht, and which exhibits nothing but bare rocks, interspersed with numerous bogs.

The mountains on either side of Glenmore rise with a steep and rugged ascent to a considerable height, averaging upwards of 1,000 feet in the neighbourhood of Loch Ness. On the western side of this lake is Mealfourvouny, 2,730 feet above the sea.

The portion of Scotland which lies to the west and north-west of Glenmore consists chiefly of an elevated table-land, which in its

central part is about 1,000 feet above the sea-level, and in some portions probably not less than 1,500 feet. Ben Wyvis, to the west of Cromarty Firth, rises to the height of 3,422 feet: Ben Attow (on the borders of Ross and Inverness, to the eastward of Loch Alsh) is about 4,000 feet high. Many other summits in this portion of Scotland are between 2,000 and 3,000 feet in elevation. The higher mountain-masses lie in general nearer the western than the eastern coasts, and terminate abruptly on the shores of the Atlantic.

This mountainous tract (which may be appropriately distinguished as the Northern Highlands), although it does not attain the great elevation of the Grampians, yet exhibits in some parts a character of greater wildness and rocky desolation than any other part of Scotland. Nearly the whole region is, in fact, a naked and barren mountain wilderness, alternating between high mountains and tracts of open moorland, covered with heath and bog.

The level districts of Northern Scotland probably do not occupy more than a twentieth part of its entire surface. They extend at intervals, along the eastern coast, from the shores of Loch Beauley and the Moray Firth to the northern extremity of the island, in the neighbourhood of the two capes of Duncansby and Dunnet Head, and form two principal plains — those of Cromarty and Caithness, the latter of which is of the larger extent. The *Plain of Cromarty* extends along both sides of the firth of that name, and thence across to the Firth of Dornoch: it contains some fertile and well-cultivated tracts.

The *Plain of Caithness* comprehends about four-fifths of the county of that name, embracing however some moorland tracts, elevated from 200 to 300 feet above the sea.

Islands.—The islands of Scotland arrange themselves into four divisions — 1. The islands in the Firth of Clyde. 2. The Hebrides. 3. The Orkney Islands. 4. The Shetland Islands. The northernmost of these groups, the Shetland Islands, extends to the parallel of 60° 49′, and forms the most outlying portion of the British Archipelago in that direction: — the island of St. Kilda, the most western of the Hebrides, is under the meridian of 8° 37′ W.

It is estimated that the Shetland Islands occupy an area of above 530 square miles, the Orkneys 400, the Hebrides 2,585, and the islands in the Firth of Clyde 171 square miles; making a total of about 3,700 square miles.

1. *Islands in the Firth of Clyde.*—These consist of the large islands of Bute and Arran, the islets of Great and Little Cumbray, and the rock of Ailsa. *Arran* measures 20 miles in length by 11 in breadth. It is a mass of heathy mountains, surrounded by a narrow belt of low-land: the mountains are highest towards the north, where Goat Fell, the loftiest summit, rises to 2,874 feet. Only a small portion of the land is cultivable.

Bute measures 15 miles in length by 5 in breadth. Its northern extremity is bleak and rugged, but the central and southern portions consist of undulating ground, fit either for tillage or pasturage.

The islands of *Great* and *Little Cumbray* lie at the entrance of the narrower portion of the Firth of Clyde, between the island of Bute and the mainland. Their surface is hilly and verdant, but bare.—*Ailsa Crag*, in the broad part of the Firth of Clyde, is an insulated hill, about two miles in circumference, and rising in precipitous cliffs to 1,140 feet above the sea. It is the resort of enormous numbers of sea-fowl.

2. The *Hebrides* or *Western Islands of Scotland* consist of two portions—those which lie adjacent to the mainland, as Jura, Islay, Mull, Skye, and others, distinguished as the *Inner Hebrides*—and those situated to the west of the channel of the Minsh, which form the *Outer Hebrides*.

The largest of the Inner Hebrides is *Skye* (535 square miles), which is covered with mountains, the highest above 3,000 feet in elevation. The cliffs on its south-west coast are 750 feet in height. Between the north part of Skye and the mainland are the islands of Rona, Raasay, Scalpa, and others: off its south-west side are Canna, Rum, Eig, and Muck—all mountainous. Farther to the south are Coll and Tiree, of less elevation. Eleven miles south-west of the last-mentioned island is the Skerryvore, a dangerous group of rocks, on which is a lighthouse.

Mull (330 square miles) is mountainous, and its highest summit, Ben More, rises to 3,185 feet. Off its south-west

coast is the little island of *Iona* or *Icolmkill*, celebrated for its ecclesiastical remains; and, a few miles farther north, the basaltic islet of *Staffa*, with its magnificent cavern.

Jura (130 square miles) and *Islay* (240 square miles) are separated by the Sound of Islay. In the former island the Paps of Jura rise to 2,568 feet in height. Islay, though hilly, is less elevated, and contains a larger proportion of cultivated land than any other of the Hebrides. Between Islay and Mull are the islands of *Colonsay* and *Oronsay* (together 18 square miles), the narrow channel between which is dry at low water, when they form one island.

The Outer Hebrides form a continuous group, of 140 miles in length, so close that they are commonly considered as one, and named the *Long Island*. The largest consists of two portions, *Lewis* (557 square miles) and *Harris* (191 square miles), united by a narrow isthmus. Farther south are the large islands of *North Uist* (118 square miles), *Benbecula* (43 square miles), and *South Uist* (127 square miles), besides an immense number of smaller islets. On the west side of Lewis the mountains reach above 1,700 feet in height, in Harris 2,660 feet. Mount Heval, in the island of North Uist, is 2,010 feet, and Ben More, in South Uist, 2,034 feet. Harris is generally mountainous, but a large portion of Lewis consists of moss and moorland. The most northern point of the Outer Hebrides is called the Butt of Lewis; to the south they terminate in the group of the Barra Islands, the most southward of which is the rock of Barra Head.

The island of *St. Kilda*, which lies 42 miles to the westward of the Long Island, is about 3 miles in length by 2 in breadth, and rises to 1,380 feet above the sea. Except at the landing-place on its south-west side, it is fenced round by inaccessible precipices. It has a few human inhabitants, and is the resort of immense numbers of sea-fowl. Still farther to the westward, at a distance of 180 miles from the nearest land, is the little islet of *Rockall*, which is uninhabited.

3. The *Orkney Islands*, divided from the mainland by the Pentland Firth, comprise Pomona (or Mainland), Hoy, North and South Ronaldsha, Westra, and many others, amounting altogether to 67 in number, only 27 of which are permanently inhabited, though many of the others serve as pasture-grounds. The surface of the islands is in general of only moderate elevation, and some of them are low and flat. The highest eminence in the group is Wart Hill, on the island of Hoy, which reaches 1,556 feet above the sea. The shores of Hoy are high and rocky on the west side, where they rise in steep precipices out of the sea. In general, however, the shores of these islands are low and sandy, with rounded hills towards the interior. The island of Sanda is throughout low, and is the most fertile of the group.

4. The *Shetland Islands* exceed 100 in number, of which between 30 and 40 are inhabited. The largest, Mainland, is 52 miles in length, and of very irregular shape. The next in size are Yell, Unst, Fetlar, Whalsay, and Bressay. Roeness Hill, in the north of Mainland, is 1,476 feet: the island of Foula, to the west of the principal group, 1,350 feet. About midway between the Orkney and Shetland groups is *Fair Island*, 708 feet high.

The surface of the Shetland group consists in general of heathy wastes, interspersed with rock, and sometimes varied by swamps and lakes. In some parts, however, the land is fertile, and produces good corn and herbage. The climate in both groups is moist, but remarkably equable in temperature. The winter, though long (especially in the more northwardly group), is not severe, and the harbours are open all the year round. In the Orkneys, frost rarely lasts more than a few days at a time. The Shetland Islands are more generally rugged, wet, and barren, than the other group. They are fenced, particularly on their western side, with high and precipitous cliffs, against which the ocean dashes with great fury, and which its waves have worn into the most various and fantastic forms.

There are a few detached islets off the eastern coasts of Scotland. These consist of the *Bass Rock* (on the south side of the entrance of the Firth of Forth), a mass of basalt, which rises perpendicularly to 400 feet above the sea; *May Island*, *Inchkeith*, *Inchcolm*, and others, all in the Firth of Forth; and the *Inch Cape*, or *Bell Rock* (14 miles east of the entrance to the Firth of Tay), the site of a celebrated lighthouse. At the eastern extremity of the Pentland Firth are some rocks called the *Pentland Skerries*.

Rivers and Lakes. — All the larger rivers of Scotland, with the exception of the Clyde and the Nith, discharge into the North Sea, upon the east side of the island. This, as similarly in the case of South Britain, results from the prevailing distribution of the high grounds, which lie nearer the western than the eastern coasts. The main chain of the Grampians, however, separates the drainage of the eastern coasts, within the highland region, into two distinct basins, giving to the one of them a south-eastern, and to the other a north-eastern, inclination. This is rendered obvious by inspection of the map. Within the highlands, the same cause which explains the numerous lochs of the western coast accounts for the absence of rivers from that region. The mountains rise at once out of the sea, with little intervening slope. On the opposite side of the same region, the descent towards the North Sea is gradual, and the valleys which open out in that direction form the basins of running streams.

The principal rivers on the *east* side of Scotland, from the English border northward, are — the Tweed, the Tyne (of Haddington), the Forth, the Leven, the Eden, the Tay, the North and South Esk, the Dee, the Don, the Ythan, the Ugie, the Doveran, the Spey, the Lossie, the Findhorn, the Nairn, and the Ness.

The principal rivers of the *western* and *south-western* coasts are — the Clyde, the Irvine, the Ayr, the Doon, the

Girvan, the Stinchar, the Cree, the Dee (Kirkcudbright), the Nith, the Annan, and another river Esk. The whole of these are within Lowland Scotland.

The *Tweed* has a length of 96 miles, and drains an area of 1,870 square miles. The tide ascends this river about 10 or 12 miles, but it is not navigable above Berwick. From its source to its mouth the Tweed has a fall of upwards of 1,500 feet: it is noted for its salmon fisheries, and, during certain seasons, is liable to considerable floods. The chief tributaries of the Tweed are the Ettrick (with its affluent, the Yarrow), the Teviot, and the Till (within the borders of England), on the right bank, — the Lyne, the Leithen, the Gala, the Lauder, and the Adder, on the left.

The *Forth* has a length of 60 miles from its source (on the skirts of Ben Lomond) to the neighbourhood of Alloa, where it unites with the firth to which it gives its name; throughout its whole course it winds very considerably: its basin is about 645 square miles. The Forth is navigable for small vessels up to Stirling; its estuary, which is about 50 miles long, forms a broad and deep channel, capable of receiving the largest vessels.

The *Tay* is the most considerable river of Scotland, both in regard to length of course and area of drainage. It has a course of about 100 miles from its source to the town of Perth, 7 miles below which it enters the Firth of Tay. The Tay drains an area of about 2,400 square miles, — more than one-eleventh part of the whole mainland of Scotland. Of its affluents, the principal are the Earn and the Almond, on its right bank, and the Lyon, the Tummel, and the Isla, on the left. The Tummel rivals the Tay in volume of water and extent of drainage above their junction, and (with its tributary, the Garry) brings down the water from an extensive system of lakes adjacent to the high district of Rannoch Moor.* The Tay is not navigable above Perth, which is also the limit of the tide-water.

The *Dee* has a length of 87 miles, and drains about 700 square miles. Its source is in the Cairngorm group of mountains, at a height of 4,060 feet above the sea, — a greater elevation than that of any other river in the British Islands: the declivity of its bed is hence very considerable, and its course, especially in its upper portion, is exceedingly rapid.

* The defile of Killiecrankie, where the Highland clans, under Viscount Dundee, gained a victory over the troops of William III. in 1689, is on the banks of the Garry, a short distance above its junction with the Tummel. The mountains approach so closely as to narrow the valley of the Garry, at this point, to the immediate bed of the stream.

The *Don*, about 50 miles in length, has a basin of 530 square miles: it is generally rather a slow river, though rising at an elevation of 1,640 feet. Neither the Dee nor the Don are navigable.

The *Spey* has a length of 96 miles, and drains an area of 1,190 square miles: its source, in a small pool called Loch Spey, is at an elevation of about 1,200 feet above the sea. Unlike most rivers, the lower portion of its course is the most rapid: in the upper part of its valley, the river slumbers in dark mossy lakes. The Spey is the wildest and most capricious of all the large British rivers, forming numerous rapids and falls, and its variations as to quantity of water are very considerable. It is not navigable.

The *Clyde*, 98 miles in length, drains about 1,580 square miles. Its source, 1,400 feet above the sea, is in the central part of the high lands of southern Scotland, and the upper part of its course is closely adjacent to some of the smaller tributaries of the Tweed basin. In the neighbourhood of Lanark, the Clyde forms three considerable falls, by which it descends 230 feet within a distance of less than 4 miles. It becomes navigable at Glasgow, which is also the limit of the tide-water. The principal tributaries of the Clyde are the Douglas, the Avon, and the Cart, on the left bank,—the Medwin, the Calder, and the Kelvin, on the right.

The *Nith* has a length of 60 miles, and drains about 460 square miles. The *Dee* (45 miles) forms in its middle portion a long narrow lake, called Loch Ken, 10 miles in length by from one-half to three-quarters of a mile in breadth. The *Esk* has the lowest part of its course within the English border. The Annan (45 miles), the Esk, and the Eden (an English river), unite in the broad expanse of sand which, at low water, forms the head of the Solway Firth.

LAKES. — The same term *loch* is used in Scotch geography to designate the fresh-water lakes of the interior, and the salt-water estuaries of the western coast. It is only the former of these that are lakes in the English sense of the term.

Lakes are very numerous in Scotland, and they especially abound within the highland region. They are for the most part long and narrow in shape, filling portions of the deep hollows between the valleys which everywhere intersect the mountains, or else occupying depressed basins within the high tracts of moorland.

The principal lakes situated within the Highlands of Scotland are enumerated in the following table: —

Lakes	Counties	Length in Miles	Breadth in Miles	Outlets
Loch Lomond	Dumbarton and Argyle	24	7	Discharges by river Leven into the Clyde
Loch Katrine	Perth . .	8	¾	Discharges into Loch Achray
Loch Achray .	Perth . .	1½	⅓	Discharges into Loch Vennachar
Loch Vennachar	Perth . .	3	½	Discharges into river Teith
Loch Voil .	Perth . .	4	⅓	Discharges, by Balvaig river, into Loch Lubnaig
Loch Lubnaig	Perth . .	4	⅓	Discharges into river Teith
Loch Tay .	Perth . .	14	1½	Discharges into river Tay
Loch Ericht .	Inverness .	14	. .	Discharges into Loch Rannoch
Loch Awe .	Argyle . .	23	1¼	Discharges by river Awe into Loch Etive, on the west coast
Loch Lydoch .	Argyle . .	10	⅓	Discharges into Loch Rannoch
Loch Rannoch	Perth . .	8	1	Discharges into river Tummel
Loch Earn .	Perth . .	8	¾	Discharges into river Earn
Loch Ness .	Inverness .	22	1¼	Discharges into river Ness
Loch Oich .	Inverness .	5	. .	Discharges into Loch Ness
Loch Lochie .	Inverness .	9	. .	Discharges into Loch Eil (W. coast)
Loch Morrer .	Inverness .	11	1	Discharges into Sound of Sleat
Loch Garry .	Inverness .	7	1	Discharges by river Garry into Loch Oich
Loch Maree .	Ross . .	12½	3	Discharges by river Ewe into Loch Ewe
Loch Fannich	Ross . .	7	1½	Discharges into Loch Luichart
Loch Luichart	Ross . .	5	1½	Discharges into Strath Conan
Loch Shin .	Sutherland	17	1	Discharges by river Shin into Dornoch Firth
Loch Coruisk .	Isle of Skye .	2	½	Discharges into L. Scavaig

The following are within the Lowlands: —

Lakes	Counties	Length in Miles	Breadth in Miles	Outlets
Loch Leven	Kinross	4	3	Discharges by river Leven into Firth of Forth
St. Mary's Loch	Selkirk	3	¾	Discharges into river Yarrow
Loch Skene	Dumfries	. .	. .	Discharges into Moffatt Water
Castle Semple Loch	Renfrew	2	½	Discharges into Black Cart river
Kilbirnie Loch	Ayr	2	. .	Discharges into river Garnoch
Loch Doon	Ayr	6	1	Discharges into river Doon
Loch Ken	Kirkcudbright	5	¼	Discharges into Loch Dee
Loch Dee	Kirkcudbright	2	½	Discharges into river Dee

Loch Lomond has an area of about 35 square miles (9,000 hectares), and is the largest lake, not merely in Scotland, but in Great Britain. It contains a considerable cluster of islands, thirty in number. Ben Lomond adjoins its eastern shore, towards its northern extremity, where it narrows considerably in breadth. Steamers navigate the lake.

Loch Katrine (or Katerin) is situated not far distant from Loch Lomond, to the eastward of the latter, but high ground intervenes between the two lakes. The shores of Loch Katrine, with the smaller lakes of Achray and Vennachar, which lie below, form the district of the Trosachs, a tract of country regarded as surpassing in varied combination of mountain lake, river, and wood, any other in the British Islands.

Loch Awe is second in magnitude among the Scotch lakes, its waters covering an area of about 26 square miles. The huge mass of Ben Cruachan rises above its northern shores.

Loch Ness, *Loch Oich*, and *Loch Lochie*, all three nearly continuous, lie within the narrow valley of Glenmore.* The falls of Fyers, which are among the finest waterfalls in Britain, rivalling those

* See *ante*, p. 316.

of the Clyde and the Tummel in beauty, are within the high valley of Strath Ericht, on the east side of Loch Ness.

Loch Maree, which is of larger size than any other among the lakes that are within the Northern Highlands (i. e. the region lying north and west of Glenmore), is distinguished above any other by the wild and rugged grandeur of its surrounding scenery. It includes numerous small islands. The almost inaccessible crags by which Loch Maree is enclosed are among the few remaining haunts of the grey eagle.

Geology and Minerals.—The rock-strata of which Scotland is chiefly composed differ widely, in most cases, from those of South Britain. The vastly greater portion of the country exhibits formations of older date than those which constitute the great mass of the English rocks, and find no equivalent in the southern division of the island, excepting within the areas of Silurian deposit, on the western side of England and Wales. The oldest crystalline rocks of Scotland, indeed, surpass in antiquity of deposit any other of the British strata, and have no equivalent elsewhere within the British Islands.

It appears as the result of the latest investigations,* that the rocks which compose nearly all the more strictly mountainous portions of Scotland, within the Highland and Lowland regions alike, belong to the extensive assemblage of strata known as Silurian, and within which the various slaty and other formations included under the term greywacke are comprehended. In southern Scotland, these strata correspond to the Silurian deposits of Wales, and the tract of the Cumbrian mountains: within the Highland region they have undergone changes which have caused them to assume a crystalline texture, so that they have become converted into clay-slates, chlorite and mica-slates, and other schistose rocks, often of gneissose character. In other words, the Silurian rocks of western and northern Scotland have become *metamorphic*. It is of the latter description of strata that the Grampian region is mainly composed. A fundamental gneiss—of older date—underlies these metamorphic Silurian deposits to the westward, and appears upon the west coast of Sutherland and in the chain of the Outer Hebrides.

The area between these two great developments of Silurian rocks is occupied by the old red sandstone and the carboniferous systems.

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* See "First Sketch of a New Geological Map of Scotland, with Explanatory Notes," by Sir R. I. Murchison and A. Geikie: Edinburgh, 1861

The first-named (old red) immediately overlie the metamorphic rocks of the Highland region, appearing upon the western side of Strathmore, throughout its length, along the base of the lower Grampians. Old red sandstone also covers a considerable area in the neighbourhood of the Moray and Dornoch firths, with the included Firth of Cromarty.

The carboniferous rocks succeed the old red sandstone to the south-eastward, and include the southern half of the peninsula of Fife, with a broad tract of country which extends thence diagonally (from N.E. to S.W.), across the mainland of Scotland, to the coast of Ayrshire. Within this latter area is comprehended the great coal-field of Scotland—or, rather, a succession of detached coal-fields, found chiefly within the counties of Fife, Clackmannan, Stirling, Edinburgh, Linlithgow, Lanark, and Ayr. Secondary rocks of later date are but sparingly developed in Scotland. Trap of various kinds has been extensively erupted throughout the carboniferous area, and appears in Arran, Mull, Skye, and others of the Western Islands, as well as on parts of the neighbouring mainland. Granite occurs extensively in the higher parts of the Grampian region, also in Skye, the south-western peninsula of Mull, the island of Arran, and within the south-western portion of the Lowland area.

Coal and iron constitute the most important of the mineral productions of Scotland. The total superficial area of the workable coal-beds is estimated at from 1,500 to 1,720 square miles.* Ironstone of the best description occurs abundantly within the carboniferous area. Lead is worked in the tract of the Louther Hills (on the borders of Lanark and Dumfries), and in a few other localities. Good building-stones are everywhere abundant.

* Hull: Coal-fields of Great Britain.

CHAPTER XVI.

SCOTLAND—POPULATION AND INDUSTRIAL PURSUITS—COUNTIES AND TOWNS.

THE population of Scotland amounted, in 1871, to 3,360,018. This is equal to an average, on the whole country, of 112 persons to the square mile. It is, therefore, comparatively to South Britain, a thinly populated country; and necessarily so, from the rugged nature of so large a portion of its surface. The distribution of the population over the country is, moreover, much more unequal and irregular than is the case with England. Large portions of Scotland exhibit a ratio of population to surface which falls very greatly below that of even the least populous of the English counties, while the inhabitants are found thickly clustered within a portion of the country which is of limited area.

At the period of the legislative union with England, in 1707, the inhabitants of Scotland are supposed not to have numbered more than 1,650,000. In 1755, when the population was first determined with any approach to accuracy, Scotland is estimated to have had 1,265,380 inhabitants. The amount of its population at successive decennial periods during the present century is given below :—

POPULATION OF SCOTLAND.

1810	1.608,420	equal to	54	persons to sq. mile
1811	1,805,864	„	60	„
1821	2,091,521	„	70	„
1831	2.364,386	„	79	„
1841	2,620,184	„	87	„
1851	2,888,742	„	96	„
1861	3,062.294	„	100	„
1871	3,360,018	„	112	„

The numerical amount of the population exhibits therefore a continuous and steady increase, although, as in the case of England, the *ratio* of this increase has undergone a gradual diminution during the last forty years. During the interval between 1811 and 1821, the population of Scotland increased in the ratio of 16 per cent. Between 1821 and 1861, this ratio underwent a steady decline to 13, 11, 10, and 6 per cent.; but between 1861 and 1871, the total increase was equal to little less than 10 per cent. The ratio of increase in the population of England and Wales during the same period was above 13 per cent.*

Large areas of Scotland, however, have undergone a considerable decrease in number of inhabitants during the last quarter of a century. Between 1851 and 1861, twelve, and between 1861 and 1871, as many as fourteen, of the counties, underwent a decrease in actual population. The decrease, during the latter period, was greatest in the counties of Kinross and Wigton (in the former of which it amounted nearly to 10, and in the latter nearly to 8 per cent.); next so in the case of Argyle (5 per cent.), Perth (above 4 per cent.), and Sutherland (above 3 per cent.). Selkirk, Renfrew, Lanark, Edinburgh, Forfar, and Dumbarton are the counties which show, between 1861 and 1871, the greatest ratio of increase.

* The numerical increase in the population (as ascertained by comparison of the number of births and deaths within a given period) is much greater than that shown by the census returns of the later as compared with those of the earlier date. The difference is explained by the large extent to which emigration takes place from Scotland, not merely to foreign countries, but to the south of the Tweed, i.e. from Scotland to England, and especially to the metropolis. This cause explains the much smaller ratio of increase in the population of Scotland, compared with that of England, at the successive decennial periods.

Of the total number of emigrants who left the British Islands during the period between the census of 1851 and that of 1861 (2,249,355), natives of Scotland numbered 183,627. This number, though much smaller absolutely than that of the emigrants from England and Wales during the same period (640,210), yet bears a much higher ratio to the total amount of the population—being, in fact, in nearly double the proportion. These figures are of course irrespective of the intra-insular migration—i.e. from Scotland into England—which is constant, and not inconsiderable in amount.

The areas of the Scotch counties, their population in 1871, and the number of inhabitants to a square mile, are given in the following table :—

Counties	Area in sq. m.	Pop. in 1871	No. of inh. to sq. m.
Aberdeen	1,970	244,603	124
Argyle	3,255	75,679	23
Ayr	1,128	200,809	178
Banff	686	62,023	90
Berwick	460	36,486	79
Bute	217	16,977	78
Caithness	712	39,992	56
Clackmannan	47	23,747	505
Dumbarton	241	58.857	244
Dumfries	1,063	74,808	70
Edinburgh	362	328,379	907
Elgin	531	43,612	82
Fife	492	160,735	327
Forfar	875	237,567	271
Haddington	271	37,771	139
Inverness	4,255	87,531	21
Kincardine	383	34,630	90
Kinross	73	7,198	98
Kirkcudbright	898	41,859	47
Lanark	882	765,339	868
Linlithgow	120	40,965	341
Nairn	215	10,225	47
Orkney	—	31,274	—
Peebles	354	12,330	35
Perth	2,523	127,768	51
Renfrew	245	216,947	886
Ross and Cromarty	3,951	80,955	25
Roxburgh	665	53,974	81
Selkirk	257	14,005	54
Shetland	—	31,608	—
Stirling	447	98,218	220
Sutherland	1,886	24.317	13
Wigton	485	38,830	80

No country in the world exhibits more clearly than Scotland the connection of physical geography with the distribution of population and the pursuits of social industry. The striking differences which obtain, in these regards, between the northern and north-western divisions of the country as compared with the south and south-east,

are brought more clearly into view by the succeeding tables, in which the counties are arranged according as they fall principally within the Highland or the Lowland regions.

The following are principally, some of them wholly, Highland counties:—

	Inh. to sq. mile		Inh. to sq. mile
Aberdeen	124	Inverness	21
Argyle	23	Nairn	47
Banff	90	Orkney and Shetland	68
Bute	78	Perth	51
Caithness	56	Ross and Cromarty	25
Elgin	82	Sutherland	13

The counties that fall either wholly, or for the most part, within the Lowlands, are—

	Inh. to sq. mile		Inh. to sq. mile
Ayr	178	Kinross	98
Berwick	79	Kirkcudbright	47
Clackmannan	505	Lanark	868
Dumbarton*	244	Linlithgow	341
Dumfries	70	Peebles	35
Edinburgh	907	Renfrew	886
Fife	327	Roxburgh	81
Forfar*	271	Selkirk	54
Haddington	139	Stirling*	220
Kincardine*	90	Wigton	80

The counties that are included in the former of these tables (i.e. the counties chiefly or altogether Highland) comprehend, with 20,336 square miles of surface, no more than 875,564 inhabitants—a ratio, on the entire average, of only 43 persons to the square mile. The counties that belong to the Lowland division of Scotland include an area of 9,748 square miles, and a population (in 1871) of 2,483,454 —equivalent to an average of 255 persons to the square mile.† The Highlands, which cover above two-thirds of the surface of Scotland,

* The western portions of Dumbarton and Stirling belong to the Highlands, as also do parts of Forfar and Kincardineshire.

† The difference here brought into view would be yet greater if, in the case of the counties which fall partly within the Highland and partly within the Lowland division, the Lowland portions were separated from their remaining and larger portions. Thus, Perthshire, through by far the greater portion of its extent, is a Highland county; but the city of Perth, which has above 25,000 inhabitants, is within the Lowlands. Similarly, in the case of Aberdeenshire—a thoroughly Highland county —the city of Aberdeen, which has upwards of 80,000 inhabitants, lies within the narrow belt of Lowland which stretches along the eastern coast, and its population is chiefly Lowland. The estimates above given are, however, sufficient for every purpose of general comparison.

include hardly more than a fourth part of its population. The Lowlands, with less than one-third part of the entire superficial area, comprehend little less than three-fourths of the inhabitants of Scotland.

The only Highland county that has a population averaging above 100 to the square mile is Aberdeenshire, and of its total number of inhabitants, a third part are found within the city of Aberdeen. The county of Ross, a thoroughly Highland region, has only 26 inhabitants to the square mile, Argyleshire no more than 23, Invernessshire only 21, while in Sutherland the ratio falls to the low number of 13 persons to the square mile. These instances are considerably below the similar cases presented in the most mountainous parts of England and Wales.

The Lowland counties present considerable and analogous differences. The more mountainous and almost exclusively pastoral portions of the Lowland region are very thinly populated. The counties of Peebles and Selkirk fall in ratio of population below the general average of the Highland division, and Kirkcudbright is but little above that average. The contrast, in this respect, between those counties and the shires of Renfrew and Lanark is as great as that presented, in the southern division of Britain, between such counties as Westmoreland and Lancashire, or between the shires of Radnor* and Glamorgan.

In Scotland, as in England and Wales, the distribution of geological strata, and the localities of mineral deposit, point to the seats of dense population. All the counties that fall within the carboniferous area of Scotland — Ayr, Renfrew, Lanark, Linlithgow, Edinburgh, Clackmannan, and Fife, with the eastern portions of Dumbarton and Stirling — are thickly populated. The county of Edinburgh ranks first in this regard. Renfrew second, and Lanark third. A large portion of Lanarkshire, including all upper Clydesdale, is pastoral: it is within middle and lower Clydesdale that its density of population is found. The tract of which the city of Glasgow forms the centre is the chief seat of the population and wealth of Scotland, as it is of its subterranean deposits of coal and iron.

The people of Scotland form two distinct races, — the *Lowlanders*, who are a mixed people, but resemble in the main the great bulk of the inhabitants of England, and speak a language which is radically the same as the English, — and the *Highlanders*, who are of the Celtic race, and speak a totally different dialect. The Lowlanders include

* Radnor, the least populous of the Welsh counties, has fifty-nine inhabitants to the square mile, and Merionethshire sixty-four. Westmoreland, the most thinly populated county of England, has eighty inhabitants to the square mile.

the great majority of the people, and the Highlanders are now chiefly confined to the districts lying north and west of the Grampians. The English language is gradually extending itself over every part of the Highlands, and the Celtic dialect will probably ere long be wholly supplanted by it.

Industrial occupations.—Scotland, in even a greater ratio than England, is principally a manufacturing and commercial country. In 1841, the proportion of the total population directly engaged in trade and manufacture was 18·1 per cent., and of those engaged in agricultural pursuits, 8·8 per cent. The generally mountainous character of the country imposes natural limits on cultivation, but the manufacturing and commercial resources of its southern portion—in the abundance of coal and iron, and the number and excellence of its harbours—are almost unbounded.

AGRICULTURE.—Only about a fourth part of the surface of Scotland is estimated to be capable of cultivation, and of this nearly one-half is in grass. Agriculture, however, is nowhere better understood, or more skilfully practised, than in some portions of the Lowlands, particularly in the Lothians (the counties of Haddington, Edinburgh, Linlithgow, to the south of the Firth of Forth), and the adjacent county of Berwick. In the counties of Dumfries, Ayr, Renfrew, Lanark, and Fife,—and also in the portion of Perth and Forfar which embraces the carse of Gowrie—as well as in parts of Aberdeen, Elgin, and Nairn—there are many fertile tracts, in which the cultivation of the soil is extensively carried on.

Throughout Scotland the staple crop consists of oats, but wheat of fine quality is grown in many of the above districts; barley is also grown, and flax, though only to a very limited extent. Turnip husbandry is extensively pursued in the counties of Haddington and Berwick, and throughout the eastern counties potatoes are largely grown, in part for the supply of the London market. The dairy-farm districts are chiefly in the counties of Ayr, Renfrew, and Dumfries.

FISHERIES.—The fisheries in Scotland constitute an important and valuable branch of industry. The salmon abounds in most of the larger rivers, especially in the Tay, the Tweed, Dee, Don, Findhorn, and Spey, and the produce of its fishery is very considerable. The herring-fishery is pursued to a great extent, chiefly on the shores of Caithness and the Moray Firth, off the entrance of the Firth of Forth, and in Loch Fyne and other places on the west coast. Cod, ling, and haddock, are likewise extensively taken, and there is a great oyster-fishery in the Firth of Forth.

MANUFACTURES. — The *cotton* manufacture is the first in importance, though of comparatively recent introduction, and the printing of cottons is carried on to a greater proportionate extent in Scotland than in England. Its chief seats are Glasgow and Paisley, and their immediate neighbourhood, in the counties of Lanark and Renfrew; with the vale of Leven, in Dumbartonshire (between the town of Dumbarton and the foot of Loch Lomond): it is also pursued, to a smaller extent, in the counties of Ayr, Aberdeen, and Perth.

The ancient staple manufacture of Scotland was that of *linen*, which is still carried on to a considerable extent, chiefly along the eastern coasts, — at Dundee (Forfar) and its neighbourhood for the coarser articles, as sailcloth, &c.—and at Dunfermline (Fife) and its vicinity for diapers, damasks, and the finer fabrics. Jute is largely employed as a substitute for flax in the coarser descriptions of linen goods.

The *woollen* manufacture, though less considerable than either of those above mentioned, is widely distributed, in great measure as a branch of domestic industry. It is pursued on the most extensive scale in the counties of Stirling, Ayr, Roxburgh, Selkirk, and Aberdeen. Woollen hosiery, blankets, and flannels are made at Hawick (Roxburgh), tartans at Stirling and Bannockburn, and carpets at the latter place and St. Ninian's (both in the immediate vicinity of Stirling). Kilmarnock (Ayr) is a noted seat of the manufacture of carpets, shawls, and other woollen goods. The manufacture of *silk* is pursued at Paisley, Glasgow, and Edinburgh. The iron-works belong chiefly to the neighbourhood of Glasgow, and the tract which extends to the east and north-east of that city.

The manufacture of soap (chiefly at Glasgow, Leith, Paisley, Aberdeen, Prestonpans, and Montrose) is a considerable branch of industry; and also the distillation of spirits from grain, pursued in almost every part of the country. Ale is brewed to a large extent in Edinburgh, Alloa, and elsewhere.

On the western coasts and islands of Scotland the manufacture of *kelp* (from the burning of sea-weed) — for use in glass-works, &c. — was formerly pursued to a considerable extent. But this branch of industry has been greatly checked by the extensive importation of barilla from the Mediterranean coasts of Spain.

Ship-building is largely carried on at Greenock and Port Glasgow. Steam-vessels are built at Glasgow, and at that city as well as at other places on the Clyde the fitting of steam-ships with their engines and machinery is more extensively pursued than at any other place in Britain. Besides those belonging to our own country, many of the finest steam-vessels owned by foreign nations have been supplied with their machinery from the banks of the Clyde.

COMMERCE. — The foreign commerce of Scotland resembles that of

England: her imports consist of the raw materials required for manufacturing purposes, chiefly cotton, with flax and jute, — and various articles of colonial produce, as tea, coffee, sugar, &c. The exports are principally manufactured goods, cotton and iron works, machinery, coals, &c. Agricultural produce is extensively supplied to England, including large numbers of cattle.

Glasgow is the great seat of the foreign commerce of Scotland, and is inferior in the total amount of its trade only to London, Liverpool, and Bristol. The commercial ports next in order of importance are Leith, Greenock, Port Glasgow, Aberdeen, and Dundee. Montrose (Forfarshire), Grangemouth (at the entrance to the Forth and Clyde Canal, Stirlingshire), Perth, and Arbroath, have also a considerable amount of foreign as well as coasting trade.

The ports of Ayr, Troon, Ardrossan, Irvine, and others on the coast of Ayrshire, export considerable quantities of coals, chiefly to Ireland and the Western Islands. The inhabitants of Peterhead are extensively engaged in the cod-fishery, and also the whale-fishery in the Northern seas.

Internal communication. — Excellent roads extend through almost every part of the country, and across even the most mountainous tracts of the Highlands.

Of *canals*, the two principal are, the *Forth and Clyde Canal*, which connects the estuaries of those rivers, through the plain which we have described under that name, and the *Caledonian Canal*, through the narrow valley (Glenmore) which extends across the Highland region, between the opposite sides of the island. The *Crinan Canal*, less than five miles in length, connects the waters of Loch Fyne with the Sound of Jura, and saves the tedious circumnavigation of the peninsula of Cantire. There are a few other canals, of merely local importance.

Nearly all the principal cities in Scotland are connected by *railway*. Two great trunk-lines enter the country from England, one on either side of the island, and proceed respectively to Glasgow and Edinburgh: from those cities, other lines proceed northward, by Stirling, Perth, Dundee, Forfar, Aberdeen, and Elgin, and extend as far as Inverness, between which place and London there is now uninterrupted railway communication of nearly 700 miles in length. The total extent of railway open in Scotland at the present time (1874) is considerably above 2,000 miles.

Divisions. — Scotland, like England, is divided into counties, thirty-three in number. The origin of this division

is obscure, but it appears to have existed — excepting in the case of certain districts, as Galloway, Ross, and the Western Isles — at as early a date as the accession of Robert Bruce.* The counties of Scotland have no subdivision into hundreds, wapentakes, &c., like those of England, nor any equivalent for those divisions. The ecclesiastical division of the kingdom is into synods, presbyteries, and parishes, the last-named of which are civil as well as ecclesiastical divisions. The division into parishes appears to have been introduced into Scotland by the middle of the twelfth century. The parishes are 922 in number.

The Scotch counties are of extremely irregular shape, and unequal size: Inverness, the largest, contains 4,255 square miles, Argyle 3,255, and Perth 2,523; while Clackmannan is only 47, and Kinross only 73, square miles in extent.

Of the islands, Bute, Arran, and the Great and Little Cumbray, form the county of Bute. The groups of the Orkney and Shetland Islands, though united for the purpose of parliamentary representation form in other respects distinct counties. In the Hebrides, the island of Lewis belongs to Ross,—Harris and the rest of the Long Island, with Skye, form part of the county of Inverness,—and Mull, Jura, Islay, and the smaller adjacent islands, belong to the shire of Argyle.

Many parts of Scotland are familiarly known by territorial names, some among which were formerly of universal prevalence. The principal of them are included in the following table:—

Angus, now Forfar		Breadalbane, part of	Perth
Annandale, part of	Dumfries	Buchan, „	Aberdeen
Appin, „	Argyle	Cantire, „	Argyle
Ardross, „	Ross	Carrick, the S.W. part of	Ayr
Athol, „	Perth	Clydesdale, part of	Lanark
Badenoch, „	Inverness	Cowal, „	Argyle

* Macculloch: Descriptive and Statistical Account of the British Isles, vol. i. In Scotland, as in the southern part of Britain, the county was the district subject to the local jurisdiction of the sheriff (or shire-reeve). In some parts of the country like powers were exercised by officers entitled stewarts, and bailies, the tracts under whom were known as stewartries, and bailiewicks. Kirkcudbright is still designated as a stewartry. In most cases the authority of a stewart or a bailiewick was exercised over particular portions of a county, under subjection to the higher power of the sheriff. In the county of Dumfries, there were, prior to 1756, three distinct jurisdictions — viz., the sheriffship of Nithsdale, the stewartry of Annandale, and the regality of Eskdale; coincident with its three natural divisions.

Cunningham, the N. part of Ayr
Eskdale, part of Dumfries
Ettrick Forest, now Selkirk
Galloway, now Kirkcudbright and Wigton
Glenelg, part of Inverness
Gowrie, „ Perth and Forfar
Knapdale, „ Argyle
Kyle, the middle part of Ayr
Lauderdale, part of Berwick
Lennox, now Dumbarton
Liddisdale, part of Roxburgh
Lochaber, „ Inverness
Lorn, „ Argyle
Lothian (East), now Haddington
Lothian (Mid) now Edinburgh
Do. (West) „ Linlithgow
Mar, part of Aberdeen
Mearns, now Kincardine
Menteith, part of Perth
Merse, now Berwick
Moray, „ Elgin
Nithsdale, part of Dumfries
Stormont, „ Perth
Strathbogie, „ Aberdeen
Strathearn, „ Perth
Strathmore „ Do. and Forfar
Strathspey, „ Elgin
Teviotdale „ Roxburgh
Tweedale, now Peebles.

Scotland is represented in the House of Commons by 60 members, 32 of whom sit as representatives of counties, 26 as representatives of cities and boroughs, and 2 as representatives of Universities.

Counties returning more than One Member each.

Lanark:—	Ayr:—	Aberdeen:—	Total 6
North	North	East	
South	South	West	

Counties returning One Member each.

Argyle.	Edinburgh.	Linlithgow.
Banff.	Fife.	Perth.
Berwick.	Forfar.	Renfrew.
Bute.	Haddington.	Roxburgh.
Caithness.	Inverness.	Stirling.
Dumbarton.	Kincardine.	Sutherland.
Dumfries.	Kirkcudbright.	Wigton.

The following unite in the return of One Member jointly:—

Clackmannan and Kinross.	Peebles and Selkirk.
Elgin and Nairn.	Ross and Cromarty.
Orkney and Shetland.	

Total of County Members, 32.

Cities and Boroughs returning more than One Member each.

Glasgow returns 3; Edinburgh 2; Dundee 2; total 7.

Cities and Boroughs returning One Member each.

Aberdeen.	Haddington,‖ &c.	Paisley.
St. Andrews,* &c.	Inverness,¶ &c.	Perth.
Ayr,† &c.	Kilmarnock,** &c.	Selkirk,‖‖ &c.
Dumfries.	Kirkcaldy,†† &c.	Stirling,¶¶ &c.
Elgin,‡ &c.	Leith,‡‡ &c.	Wick.*** &c.
Falkirk,§ &c.	Montrose,§§ &c.	Wigton,††† &c.
Greenock.		

Total of Members for Cities and Boroughs, 26.

Universities of Edinburgh and St. Andrews jointly return 1 Member.

Universities of Glasgow and Aberdeen jointly return 1 Member.

* The boroughs of Cupar (Fife), Crail, Anstruther (Easter and Wester), Kilrenny, and Pittenweem, unite with St. Andrew in the return of a single member.

† Associated boroughs, Irvine, Campbeltown, Inverary, and Oban.

‡ Associated boroughs, Banff, Cullen (both in Banffshire); Inverury, Kintore, and Peterhead (all three in Aberdeenshire).

§ Associated boroughs, Airdrie, Hamilton, Lanark (all in Lanarkshire), and Linlithgow.

‖ Associated boroughs, North Berwick and Dunbar (both in Haddingtonshire), Jedburgh (Roxburghshire), and Lauder (Berwickshire).

¶ Associated boroughs, Forres (co. Elgin), Fortrose (Ross), and Nairn.

** Associated boroughs, Dumbarton, Port Glasgow, Renfrew, and Rutherglen (Lanarkshire).

†† Associated boroughs, Burntisland, Dysart, and Kinghorn (all in Fifeshire).

‡‡ Associated boroughs, Musselburgh and Portobello (both in Edinburghshire).

§§ Associated boroughs, Forfar, Arbroath, Brechin (all three, with Montrose itself, in Forfarshire), and Bervie (Kincardineshire).

‖‖ Associated boroughs, Hawick (Roxburghshire), and Galashiels (Selkirkshire).

¶¶ Associated boroughs, Culross (Perthshire), Dunfermline, Inverkeithing (both Fifeshire), and Queensferry (Linlithgowshire).

*** Associated boroughs, Cromarty, Dingwall, Tain (all three Ross and Cromarty), Dornoch (Sutherland), and Kirkwall (Caithness).

††† Associated boroughs, Stranraer and Whithorn (Wigtonshire), with New Galloway (Kirkcudbrightshire).

CHAPTER XVII.

IRELAND.

I. Physical Geography.

Area and Boundaries. — Ireland is bounded on the north, west, and south by the Atlantic Ocean, and on the east by the Irish Sea, which communicates with the ocean by the North Channel, and St. George's Channel. The nearest approach made by Ireland to the shores of Britain is at its north-eastern extremity, where the promontory called Fair Head is only 13 miles distant from the Mull of Cantire in Scotland; this is the narrowest portion of the North Channel: farther south, between Donaghadee (in the county of Down) and Port Patrick, on the coast of Wigton, is a distance of only 22 miles. St. David's Head, on the coast of Wales, is 53 miles distant from Carnsore Point, at the S.E. extremity of Ireland,—the intervening sea forming the narrowest part of St. George's Channel.

The most northern point of Ireland is Malin Head, lat. 55° 22′; the most southern, Mizen Head, is in lat. 51° 26′. A straight line drawn between these two points measures 290 miles: the mean length of the island, however, from Malin Head to the south coast of Waterford, is about 220 miles. The most eastern point, on the coast of Down, is in 5° 26′ W. longitude;—the most western, Dunmore Head, in 10° 29′.

The greatest breadth of Ireland, in the direction of east and west, is 175 miles, and the least (between the heads of Donegal Bay and Belfast Lough) less than 90 miles. Between the opposite bays of Dublin and Galway, the distance is 110 miles. The mean breadth of the island is about 140 miles.

The mean length and breadth of Ireland bear less unequal proportion to one another than is the case either with England or Scotland, and the island, regarded as a whole, has a squarer and compacter form. Its general shape, disregarding the extreme projections of the land, resembles that of an oblique parallelogram, or rhomboid, the sides of which are formed by lines drawn between the promontories of Fair Head in the north-east, Erris Head in the north-west, Mizen Head in the south-west, and Carnsore Point in the south-east. The figure formed by straight lines connecting these points gives a correct general outline of the country, and the direction of its coasts.

The superficial extent of Ireland is 32,513 square miles (8,420,867 hectares), and the entire length of its coast-line, measured along the numerous estuaries of its western and northern shores, probably exceeds 2,000 miles.

CAPES.—The principal headlands of the Irish coast are—

On the north.	Height in Feet	*On the south.*	Height in Feet
Fair Head, or Benmore (Antrim)	626	Mizen Head (Cork)	
Bengore Head (Antrim)	400	Cape Clear, on island (do)	
Malin Head (Donegal)		Old Head of Kinsale (do.)	
Horn Head (do.)	921	Hook Head (Wexford)	
		Carnsore Point (do.)	
On the west.		*On the east.*	
Rossan Point (Donegal)		Greenore Point (Wexford)	
Erris Head (Mayo)		Cahore Point (do.)	
Achil Head (do.)		Wicklow Point (Wicklow)	
Slyne Head (Galway)		Bray Head (do.)	
Loop Head (Clare)	248	Howth Head (Dublin)	549
Kerry Head (Kerry)		Clogher Head (Louth)	181
Dunmore Head (do.)			

Adjacent to Bengore Head, on the west, is the Giant's Causeway, a basaltic promontory which projects into the sea for upwards of 1,000 feet, and consists of huge piles of prismatic columns, arranged side by side with the most perfect regularity.

The north, north-west, south-west, and south shores of

Ireland are generally high and rocky, exhibiting in many places rugged and precipitous cliffs, hollowed into various forms by the ceaseless action of the Atlantic waves.

The eastern coasts are generally low and flat, and on this side of the island the sea in the immediate vicinity of the shore is much obstructed by sunken rocks, bars, and sand-banks. These are especially numerous on the north-east coasts, off the shores of Down and Antrim, and along the coast to the south of Dublin.

ESTUARIES, BAYS, &c.—The principal inlets on the east coast are—Dublin Bay, Dundalk Bay, Carlingford Lough, Dundrum Bay, Strangford Lough, and Belfast Lough. On the north coast are Lough Foyle and Lough Swilly.

On the west side of the island are—Donegal Bay, Clew Bay, Galway Bay, the mouth of the Shannon, Dingle Bay, Kenmare Bay, and Bantry Bay.

On the south coast, the most considerable inlets are the harbours of Cork and Waterford.

The west and south-west coasts are more indented and irregular in shape than any other part of the island. The numerous inlets enclose various peninsulas, of which the most remarkable is that called the Mullet (on the north-west coast of Mayo): this is connected with the mainland by an isthmus less than half a mile broad.

The sea on the western coasts both of Ireland and Scotland is generally deep, and at a distance of about 60 miles from the Irish coast sinks suddenly from 100 to upwards of 200 fathoms. Here the proper bed of the ocean may be said to commence, the entire group of the British Islands being based upon a submarine bank, or plateau.

DIVISIONS.—Ireland is divided into four provinces, Ulster, Leinster, Munster, and Connaught; and into thirty-two counties, of which Ulster contains nine, Leinster twelve, Connaught five, and Munster six. Ulster occupies the north and north-east part of the island, Leinster the east and south-east, Connaught the west and north-west, and Munster the south-west, portions.

The names of the counties, with their areas, in English square miles, are given in the following table: —

Leinster.	Square Miles
Dublin	354
Meath	906
Louth	315
Westmeath	709
Longford	421
King's County	772
Queen's County	664
Kilkenny	796
Carlow	346
Kildare	654
Wicklow	781
Wexford	901

Connaught.	
Leitrim	613
Roscommon	950
Sligo	722
Mayo	2,131
Galway	2,447

Ulster.	Square Miles
Armagh	513
Down	957
Antrim	1,190
Londonderry	810
Donegal	1,865
Tyrone	1,260
Fermanagh	714
Monaghan	500
Cavan	746

Munster.	
Clare	1,294
Limerick	1,064
Tipperary	1,659
Waterford	721
Cork	2,885
Kerry	1,853

Features of Surface. — Ireland is generally level in the interior; its mountains are chiefly found in the immediate neighbourhood of the coast. Between Dublin Bay on the east, and Galway Bay on the west, a great plain stretches entirely across the island: the highest parts of this central plain are not more than 320 feet above the level of the sea. It extends northward to the shores of Lough Neagh, in the province of Ulster, and southward nearly to the borders of Waterford, in the province of Munster: its southern half, however, is diversified by hills of considerable elevation.

The mountains of Ireland do not form continuous chains, but constitute detached groups and highland masses, which at different localities intervene between the interior plain and the sea. They may be regarded, for the purpose of brief description, under six headings, viz.: — The Mountains of Wicklow, — the Mourne Mountains (in the county of Down), — and the Mountains of Antrim, — on the east

coast of the island; — the Mountains of Donegal, in the north-west; — the Mountains of Connemara and Mayo, in the west; — and the Mountains of Kerry, in the south-west.

1. The *Mountains of Wicklow* cover an extensive tract, which measures nearly 60 miles from north to south, and about 30 miles from east to west. Their highest summit, Lugnaquilla (in the centre of the mountain-region), is 3,039 feet above the sea, and is the third in elevation of the Irish mountains. Numerous other summits in the group exceed 2,000 feet. This mountain-region contains numerous small lakes and waterfalls, and is highly distinguished for the variety and beauty of its natural scenery.

2. The *Mourne Mountains* occupy a projecting portion of the coast, intermediate between Dundalk and Dundrum Bays, and rise in elevated masses from the immediate neighbourhood of the shore. Their highest summit, Slieve-donard, is 2,788 feet above the sea. Several other summits belonging to the group are nearly as elevated. Slieve-more (closely adjacent to Slieve-donard on the west) is 2,443 feet, and Slieve-beg, 2,384 feet. Slieve-bingian, to the southward, is 2,449 feet.

3. The *Mountains of Antrim* form a kind of plateau which intervenes between Lough Neagh and the shores of the North Channel, and the highest portions of which are on its eastern side, immediately adjacent to the coast. The loftiest of the Antrim mountains is Trostan (in lat. 55° 2′, a short distance S.W. of Cushendall and the shore of Red Bay), which reaches 1,810 feet. Slieveanee, adjacent to Trostan on the S.W., is 1,782 feet. Several other points are nearly as elevated. Divis, to the west of Belfast, is 1,559 feet high. This mountain tract terminates on the north-east in the promontory of Fair Head.

4. The *Mountains of Donegal* form a high mountain-mass, intersected by parallel valleys which extend in a general direction of north-east and south-west. They contain several summits which exceed 2,000 feet in height, the

loftiest of which is Errigal (lat. 55° 3′, long. 8° 5′), 2,462 feet. The cliffs which line the coast adjacent to Rossan Point, forming the seaward termination of a portion of the mountain tract, are 750 feet in height. Slieve League, to the south-east of the same point, rises precipitously close to the shore, and is 1,964 feet high.

Between the Mountains of Donegal and the mountain-region of Antrim some high ranges extend (to the south of Lough Foyle), in an east and west direction, through the county of Londonderry. Sawell, within this tract of country (lat. 54° 49′, long. 7° 2′), is 2,236 feet in height.

5. The mountain tract which extends along the western shores of Mayo and Galway, between Donegal and Galway Bays, is divided into two parts by the broad inlet of Clew Bay (lat. 53° 50′). To the north of Clew Bay are the Nephin Beg Mountains and the high summit of Nephin, — to the south, the *Mountains of Connemara*, which embrace a number of detached groups and insulated eminences, divided by deep and narrow valleys. In the Nephin Beg Mountains the highest summit is 2,368 feet; Nephin, farther to the eastward, is 2,639 feet high. The cliffs on the north coast of Achil Island, which is only divided from this part of the mainland by the narrow channel of Achil Sound, are from 900 feet to 1,800 feet in elevation. In the Mountains of Connemara, Mweelrea, adjacent to the west coast, is 2,680 feet in height, and some others reach upwards of 2,000 feet.

6. The *Mountains of Kerry* form several parallel ranges which extend (in a general east and west direction) through the county of that name, and into the adjacent county of Cork. Between these ranges the sea penetrates far within the land, and forms the numerous long and narrow estuaries which distinguish the south-west portion of Ireland. The highest summit among the mountains of Kerry, and also the highest in the island, is Carrantual, in the group of Macgillicuddy's Reeks (on the west side of the Lakes of Killarney), 3,404 feet above the sea. Mangerton, on the

south-east side of the same lakes, is 2,754 feet. Mount Brandon, in the peninsula lying to the north of Dingle Bay, is 3,120 feet, and is second in height among the mountains of Ireland. Hungry Hill, within the neck of land that stretches between Kenmare and Bantry Bays, reaches 2,249 feet.

Besides the mountain systems above described, there are other ranges of less extent, as the Slieve Bloom Mountains (on the borders of King's County and Queen's County), 1,691 feet,—the Silver Mine Mountains (in the north-west of Tipperary), 2,265 feet,—the Galty Mountains (on the borders of Tipperary and Limerick), 3,008 feet,—and the Knockmeiledown Mountains (on the borders of Tipperary and Waterford), 2,598 feet. The Galty and Knockmeiledown ranges, with others in the south of Ireland, form prolongations of the mountains of Kerry, and have the same general parallelism of direction from east to west.

A large portion of the surface of Ireland consists of bog-land, which prevails most extensively in that part of the central plain which lies between Dublin and Galway Bays, and among the mountain tracts of the western coast. Bogs occur also in other parts of the island, among the mountains of Wicklow, and those of the north-eastern coast. The bogs of Ireland bear no analogy to the fen districts of England; they lie in all cases at some elevation above the level of the sea, varying in height from 100 to 2,000 feet, and are hence readily susceptible of drainage.

The total extent of bog-land is estimated to cover about 12,500 square miles, or nearly two-fifths of the whole surface of the island: the larger portion of this is flat red-bog, capable of being reclaimed for cultivation; the remainder consists of mountain-bog, mostly convertible into pasture-land. The bogs are distinguished, according to the substance of which they are composed, into red or fibrous, and black or compact. The red bogs, which occur most extensively in the region of the central plain, furnish abundance of peat, which forms the fuel most generally used in Ireland.

ISLANDS.—These are all of small size, and lie closely adjacent to the coast. On the east side are—*Dalkey Island* (on the south side of the entrance to Dublin Bay)—*Ireland's Eye*, a hill of pyramidal form (on the north side of the peninsula of Howth)—and *Lambay Island*, a few miles farther northward.

On the north coast are—*Rathlin Island* (7 miles long and ¾ broad), which consists of steep basaltic rocks—*Inishtrahull*, a small islet to the north-east of Malin Head—*Inch Island*, situated in Lough Swilly—and *Tory Island*, off the north-west coast of Donegal.

On the west side are—*Aran Island*, off the west coast of Donegal—*Eagle Island* and several other small islets situated to the west of the peninsula of the Mullet—*Achil Island* (about 55 square miles in area), covered with mountains, the highest of which rises to 2,222 feet—*Clare Island* and several others to the west of Clew Bay, and along the adjacent shores of Galway—and the group of the *Arran Islands* (three in number, the largest about 12 square miles), at the entrance of Galway Bay.

Off the south-west coast is a group of islets called the *Blaskets*, to the west of Dunmore Head. Farther south is *Valentia Island* (on the south side of the entrance of Dingle Bay), which has an area of 10 square miles; it is of moderate elevation, and is very fertile. *Cape Clear Island*, the most southern portion of Ireland, includes about 4 square miles; it is surrounded by high cliffs, and is generally barren.

RIVERS.—The longest river of Ireland is the *Shannon*, which flows 224 miles from its source (in the county of Cavan, at a height of 345 feet above the sea) to the Atlantic Ocean, between Loop and Kerry Heads—forming in the last 60 miles of its course a magnificent estuary, from 1 mile to 11 miles broad. It is navigable from the sea to Lough Allen, a distance of 213 miles, by the aid of some short artificial cuts, the principal of which avoids the rapids of Doonas, a few miles above Limerick. The fall of the Shannon, like that of the Spey, is greater in the lower than

in the upper part of its course. It passes through three considerable lakes (Lough Allen, Lough Ree, and Lough Derg), and drains a surface of nearly 7,000 square miles. Its most considerable tributary is the river Suck, which joins its right bank.

The other principal rivers of Ireland, proceeding in succession round the coast, are—on the south, the *Bandon* (46 miles), the *Lee* (60 miles), the *Blackwater* (90 miles), and the *Barrow* (114 miles), with its tributary the *Suir* (100 miles).

The Bandon is navigable to Innishannon, a distance of 13 miles. The Lee drains an area of nearly 600 square miles, and forms at its mouth the magnificent harbour of Cork, one of the finest in the world: it is not navigable above Cork. The Blackwater has a basin of 1,165 square miles, and is navigable to Fermoy, 36 miles above its mouth.

The Barrow and the Suir, both of which rise in the Slieve Bloom Mountains, and unite to form the estuary of Waterford Harbour, drain a very extensive tract of country, comprehending above 3,400 square miles. The river Nore, a considerable tributary of the Barrow, joins its right bank. The Barrow is navigable to Athy, 60 miles from the sea; the Suir to Clonmel, a distance of 40 miles; the Nore to Thomastown, 28 miles above its junction with the Barrow.

On the east coast are, the *Slaney* (70 miles); the *Liffey* (75 miles); the *Boyne* (80 miles); and the *Lagan* (42 miles), flowing into Belfast Lough. The Slaney, which forms at its mouth the harbour of Wexford, is navigable to Enniscorthy (15 miles): the area of its basin exceeds 700 square miles. The Liffey has the metropolis, Dublin, at its mouth, but is not a navigable river. The Boyne, which drains about 1,000 square miles, is navigable to Navan, 25 miles above its mouth.

On the north coast the two principal rivers are the *Bann* (from Lough Neagh); and the *Foyle*, which flows into Lough Foyle. The Bann is divided into the Upper and the Lower

Bann; the Upper Bann is the portion above Lough Neagh, and has its source in the Mourne Mountains. The total length of the Bann is about 90 miles, and the area of its basin above 2,300 square miles: it is navigable to Coleraine, five miles above its mouth. The Foyle, 80 miles to its most distant source, is formed by the union of several streams, and drains an area of 1,100 square miles: it is navigable to Strabane, 20 miles above its mouth.

LAKES.—*Lough Neagh*,* the largest lake in the British Islands, is 20 miles long and 10 in average breadth, and has an area exceeding 150 square miles. Its elevation above the sea-level is only 48 feet; its greatest depth is 102 feet,—its average depth, however, not more than from 40 to 50 feet. Its shores are low and flat. The waters of Lough Neagh are celebrated for their petrifying quality.

Lough Erne consists of two parts — an Upper and a Lower Lake, which are connected by the winding channel of the river Erne: they are both (the Upper Lake especially) interspersed with numerous islands. Their total area is 57 square miles: the greatest depth of the Lower Lake is 226 feet, and its height above the sea-level 150 feet. The river Erne flows from the western extremity of Lough Erne into Donegal Bay.

Lough Allen (161 feet above the sea), *Lough Ree* (125 feet), and *Lough Derg* (110 feet), all belong to the course of the Shannon, and are long and narrow in shape. Lough Allen has an area of 14 square miles; Lough Ree of 41 square miles; and Lough Derg, of 46 square miles. The shores of Lough Ree are low and flat, but Lough Derg is bordered on the south by high mountains.

There is also another and smaller *Lough Derg* (3¼ square miles), in the south of Donegal, which lies at an elevation of 467 feet. On a small island which it contains is a cave called St. Patrick's Purgatory, a noted place of pilgrimage to the Catholic population of Ireland.

* Like the term "loch" in Scotland, the word "lough" in Ireland is applied both to inlets of the sea and to fresh-water lakes.

Lough Mask, in the western part of Connaught, has an area of 35 square miles, and is at a height of 68 feet: it communicates by a subterranean channel with *Lough Corrib*, which lies at a lower level. Lough Corrib is divided into two parts by a narrow channel: its total area is 68 square miles. Its waters are discharged into Galway Bay, by a stream at the mouth of which is the town of Galway.

The *Lakes of Killarney*, situated amongst the mountains of Kerry, are three in number, an Upper, Middle, and Lower Lake, all connected with one another, and of which the latter expands to the largest size. Their total area is about 10 square miles. The greatest depth of the Lower Lake is 252 feet, and its height above the sea-level 68 feet. The Lakes of Killarney are celebrated for their picturesque beauty: on their western side the highest mountains of Ireland rise steeply from the edge of the water.

There are numerous smaller lakes in the island. Including these latter, the entire superficial area of the Irish lakes exceeds 700 square miles.

Beside lakes, properly so called, *turloughs*, or periodical sheets of water, abound in some parts of Ireland, especially within the counties of Galway, Clare, and other parts of the west. These are temporary lakes, the waters of which are absorbed, during a few months of summer, within the cavities of the limestone plain in which they occur. A crop of coarse grass then occupies the basin of the turlough, which is used for grazing purposes. The waters generally rise in September or October, and remain on the surface until the ensuing May. Some of the turloughs are of considerable size, one of those within Galway measuring more than three miles across.

Geology and Minerals.—The great feature in the geology of Ireland is the predominance of limestone, belonging to the carboniferous period. The whole interior of the island is a vast plain of carboniferous limestone, round the borders of which are various older rocks — many of them of igneous origin — protruded through its surface, and rising to con-

siderable elevations above its level. Of the older sedimentary rocks, red sandstone (Devonian) and clay-slate (Silurian) occupy the most extensive areas, and predominate especially in the mountain-tracts of the south and south-east, i.e. in the counties of Kerry, Cork, Waterford, the mountainous parts of Wexford and Wicklow, and the south-eastern division of Ulster. The mountain-region of the north-west —Donegal and the adjacent part of Londonderry — consists chiefly of mica-slate, intermingled with quartz, metamorphic limestone, granite, and various igneous rocks. The mountains of Mayo and Galway are similarly constituted. Tabular trap covers nearly the whole of Antrim, and appears on the northern coast of that county in the basaltic columns of the well known Giant's Causeway. In general, the older fossiliferous rocks, with those of crystalline texture, intervene between the limestone of the central plain and the waters of the surrounding seas: but between the bays of Dublin and Galway the limestone plain stretches continuously across the island, from sea to sea.

The carboniferous limestones of Ireland are divided into three series — upper, middle, and lower. The lower series, which covers by far the largest area, is a thick-bedded grey limestone, sometimes dolomitic and oolitic in structure. The middle limestone (or calp series) is of blackish or dark grey colour, and often alternates with beds of shale. The upper or bluish limestone is of compacter and more crystalline texture, and is sometimes dolomitic or oolitic, alternating occasionally with shale.

Sedimentary strata of later origin than the carboniferous period are but sparingly developed in Ireland, and are altogether absent over by far the larger portion of the island. The millstone-grit and coal, which in England and Wales are everywhere superimposed upon the carboniferous limestones, are here generally wanting. Even in those portions of the island where coal-measures occur, as in the counties of Clare, Kerry, Limerick, Tipperary, Cork, Waterford, and Kilkenny, the beds of coal are in general found

compressed to a few inches in thickness, so that coal-mining is there conducted like vein-mining.* The coal-measures are here of the same age as the upper limestone shale of England. In the coal-fields of Ulster, at Ballycastle (in the N.E. of Antrim), and in the eastern part of Tyrone, the coal-measures are underlaid by millstone-grit, and belong to the same age as those of England.

Coal occurs in Ireland within the counties of Antrim, Tyrone, Leitrim, Clare, Kerry, Cork, Limerick, Tipperary, Kilkenny, and Queen's County. It is, however, generally of very inferior quality to that furnished by the coal-fields of Great Britain, and is comparatively little worked. The coal of the Irish coal-measures is mostly of the nature of anthracite. A considerable portion of that raised is only used for the purpose of burning lime. The best for domestic purposes is found to the west of Lough Neagh, in the neighbourhood of Dungannon. Peat, however, is the fuel exclusively used by the labouring population, and the towns are chiefly supplied with coal from the ports of England and Scotland.

Iron ore occurs in many places, especially within the coal district of Leitrim, lying round Lough Allen, but the scarcity of coal has caused its working to be almost wholly abandoned.

Both *copper* and *lead* are worked in the counties of Waterford, Cork, and Kerry, and copper also in Wicklow, but the produce is not considerable. The copper ore is sent to Swansea to be smelted. Small quantities of both gold and silver are found in the mountain-region of Wicklow.

Granite is abundant in many parts of the country, and in the counties of Donegal and Galway excellent statuary marble is found. Limestone is nearly everywhere abundant.

* Hull: Coal-fields of Great Britain. "That Ireland (says Mr. Hull) was once covered over two-thirds of its extent by coal-beds, is a proposition which we may confidently affirm on geological grounds; but the misfortunes of the sister isle began long before the landing of Strongbow, for old Father Neptune has swept the coal and coal-strata clean into his alp, and left little but a bare floor of limestone behind."

On the southern and western borders of Lough Neagh there is an extensive deposit of clay, which is found only at a few other places in Ireland, and in small quantities. Antimony, manganese, and fullers' earth, are found in some places, and slate is quarried to a small extent, chiefly in the valley of the Blackwater, near Lismore.

Mineral springs occur at Mallow (in the county of Cork), the water of which is saline, and of a temperature 23°, above that of the atmosphere; — chalybeate waters at Castle Connell, near Limerick, and in the neighbourhood of Tralee (Kerry); — and sulphurous waters at Swanlinbar, in the county of Cavan, and Lucan, near Dublin.

CLIMATE.— The climate of Ireland differs chiefly from that of England in its greater degree of moisture. About 31 inches of rain fall annually at Dublin, and 40 inches at Cork. The atmosphere is at all times largely impregnated with moisture, and the average number of days upon which rain falls, amounting to 208 annually, is greater than in any other country in Europe. This results from the perfectly insular situation of the country, and the prevalence during three-fourths of the year of westerly winds, charged with the vapours of the Atlantic. The almost constant humidity of the air is the cause of the generally verdant aspect by which Ireland is distinguished; the trees hence remain longer in leaf than in England.

The western coasts of Ireland are warmer than similar latitudes in Great Britain, and the whole island has a more equable average temperature, its extremes of heat and cold being confined within much narrower limits than is the case either in England or Scotland.

The plants and animals are generally the same as those which belong to Great Britain. There are some local peculiarities, but these are not of importance. The arbutus, a beautiful evergreen which flourishes in the neighbourhood of the Lakes of Killarney and the south-west coast, is not native to any other country in so high a latitude. The

broad-leaved myrtle grows luxuriantly in the southern counties; but peaches, grapes, and other similar fruits, do not ripen without much care and attention.

Ireland was formerly thickly covered with forests, but the greater part of these have been cut down, and wood is now comparatively scarce. The remains of ancient vegetation are found in the extensive bogs, in which whole trunks of trees are frequently discovered.

There are no serpents in Ireland: one species of lizard, with four of the order of frogs, newts, &c., constitute the only reptiles met with, and even some of these are probably of recent introduction.

II. Population and Industry.

Population.—Ireland had in 1871 a population of 5,411,416, equal, on the average of the entire surface of the island, to 166 persons to the square mile. At the preceding census of 1861, the population was 5,798,967, equal to 178 persons for every square mile. Twenty years previously, in 1841, the number of the population was 8,196,597, which was in the ratio of 252 persons for every square mile of surface.

The amount of the Irish population has therefore undergone a great change during the last thirty years, the decrease in its numbers within that period amounting to above two millions and three quarters, or more than a third (34 per cent.)! So considerable a diminution is probably unexampled in modern experience. In 1841, the population of Ireland had reached its maximum as to number. In 1821, when the first complete census of the Irish population was taken, the numbers amounted to 6,801,827. The census of 1831 exhibited a population of 7,767,401.*

* The increase in the population of the island appears, indeed, to have been continuous from the earliest period at which we have any authentic data respecting its numbers; that is, from the latter part of the 17th century, at which time (1672) Sir William Petty estimated its numbers

The ratio of decrease in the numbers of the Irish population during the twenty years between 1841 and 1861 is shown in the following table: —

Provinces	Pop. in 1841	Pop. in 1851	Pop. in 1861	Decrease from 1841-51	Decrease from 1851-61
				Per cent.	Per cent.
Leinster . .	1,973,731	1,672,738	1,439,596	15¼	14
Munster . .	2.396,161	1,857,736	1,503,200	22½	19
Ulster . .	2,386,373	2,011,880	1,910,408	15½	5
Connaught .	1,418,859	1,010,031	911,339	29	9¾
Total of Ireland .	8,175,124	6,552,385	5,764,543	20	12

It appears from this table that the decrease in the number of inhabitants has been most considerable, during the earlier of the two periods (1841–51), in the province of Connaught, and least so in Leinster: during the latter period (1851–61) the decrease has been greatest in Munster, and least considerable in Ulster. During the period between 1841 and 1851, the only counties of Ireland which increased in number of inhabitants were Dublin and Antrim: in all the rest of the island, a decrease, more or less considerable, occurred.*

at about 1,100,000. From 1785 downward the ratio of increase became astonishingly rapid, and continued so during the succeeding half century. — See M'Culloch, Brit. Emp. vol. i. p. 436.

* Yet some of the larger towns increased in population during the same period. Thus, the total population of Antrim, in 1841, was 351,496, of which number the town of Belfast had 75,308 inhabitants. In 1851, the population of Belfast had increased to 100,301, while that of the whole county (Belfast inclusive) was 351,684. Belfast had increased its number of inhabitants in the ratio of 33 per cent., while the decrease which the rest of the county underwent, during the same period, was nearly 9 per cent. The total population of the county, Belfast included, was nearly the same, showing an increase of no more than 188 persons during the interval. Similarly, the city of Cork increased its population, between 1841 and 1851, in the ratio of 6 per cent.; but the whole county of Cork underwent a diminution amounting to nearly 24 per cent.: excluding the city of Cork, the decrease during the period, in the population of the county, was above 27 per cent. So, the county of Dublin (excluding the city of Dublin) underwent a decrease of nearly 5 per cent., though the total population of the county, including the city exhibited an increase.

During the later ten years, 1851–61, the only county which shows an increase in the total number of its population is Antrim. The increase in this case is entirely due to the growth of the towns of Belfast and Carrickfergus, the former of which has gained in population within the interval in the ratio of nearly 19 per cent., and the latter of above 10 per cent., while the rest of the county has decreased by one and a half per cent. The population of the city of Dublin, during the same period, has decreased upwards of 3 per cent., but the county of Dublin, including the suburbs of that city, exhibits an increase in the ratio of between 3 and 4 per cent.

The decrease in the numbers of the population, during the period between 1851 and 1861, is most apparent in the counties of Tipperary, Clare, Meath, Kilkenny, King's County, Wexford, Waterford, and Cork, with the towns of Kilkenny and Galway.

This remarkable diminution in the numbers of the Irish population within the last twenty years is mainly due to the continuous stream of emigration which has been directed from Ireland to other parts of the world, and in particular to the countries on the western side of the Atlantic — i.e. the United States and the British colonies in North America. The terrible suffering which attended the failure of the potato crop, and consequent famine of 1846–48, contributed largely to the decrease during the earlier decade (1841–51), and the effect of this dreadful calamity must have extended into the earlier portion of the ensuing period of ten years; but emigration to other lands is no doubt to be regarded as the main cause for the present population of Ireland numbering little more than two-thirds of its amount twenty years since.

Even now, however, Ireland is thickly populated, compared with most other countries, and astonishingly so, considering the large amount of waste and unemployed land — mountain and bog — which it includes. Its ratio of population, even at the present time (166 persons to the square mile), is greater than that of either France, Prussia, Bavaria, Hungary, Switzerland, Portugal, or Denmark, and double that of either Spain, Turkey, or Greece. It is, indeed, amongst European countries, only exceeded in populousness by England, the Netherlands, Belgium, Italy, and portions of Germany. The present density of population in Ireland exceeds in the ratio of three-fifths that in the case of Scotland, which has only 112 persons to the square mile, and is greater than that of Wales, which has 164 persons to the square mile.

The evidences of an original Celtic population are thickly strewn over Ireland, and its older topographical nomenclature is almost exclusively Celtic, as the native speech of the great majority of its inhabitants has down to a late period continued to be.

The great majority of the people still belong to the Celtic race, though in the parts most adjacent to England, and in the large towns, they have become partially mixed with the descendants of English colonists. The English language is now generally prevalent, and the native Celtic dialect is in gradual process of extinction, though still spoken by the peasantry in the southern and western parts of the island.

In the eastern part of Ulster the population is almost wholly of Scotch origin. The manners and national characteristics of the people of Lowland Scotland have hence been transplanted thither. Colonists from Scotland have at various times settled in Ireland, but the great colonisation of Ulster by the Scotch took place during the reign of James I., in 1612 and succeeding years.* The inhabitants of Ulster occupy a higher rank in the social scale than those of any other part of Ireland, and are generally a more frugal, industrious, and intelligent race.

Industrial Occupations: Agriculture. — Ireland is chiefly a grazing country, and large numbers of cattle are reared, principally for export to England. Oxen are most extensively bred in the counties of Limerick, Tipperary, Roscommon, and Meath: the native cattle have been to a great extent superseded by the introduction of English breeds. Roscommon, Galway, Clare, Tipperary, and Limerick, are the chief counties for breeding sheep, but these are not so extensively reared as oxen: the native sheep is small and partially covered with hair, but it has been crossed with English breeds, and most of the Irish sheep are at present long-woolled and of large size. A breed of fine short-woolled sheep is peculiar to the mountains of Wicklow. Goats are very generally reared in the mountainous districts, and are kept chiefly for their milk. The hog, however, is the animal most universally found, and almost throughout the country shares the habitations of the peasantry, feeding chiefly on potatoes. Dairy-farms are numerous, and butter is made and exported in large quantities.

Oats take, at the present time, the most important place in Irish

* Hume: chaps. xlvi. and lv. "The whole province of Ulster having fallen into the crown by the attainder of rebels, a company was established in London for planting new colonies in that fertile country: the property was divided into moderate shares, the largest not exceeding 2,000 acres: tenants were brought over from England and Scotland: the Irish were removed from the hills and fastnesses, and settled in the open country: husbandry and the arts were taught them: a fixed habitation secured: and, by these means, Ulster, from being the most wild and disorderly province of all Ireland, soon became the best cultivated and most civilised."

husbandry, and constitute the largest tilled crop. Potatoes, until within a recent period by much the most considerable crop, now take only the second place. The humidity of the climate renders it less fitted for wheat and barley, both of which, however, are raised, and the cultivation of the former has extended of late years. The greater part of the grain raised in Ireland is not consumed in that country, but exported to England. Turnips are cultivated in many districts, and have of late become a very general crop. Mangold-wurzel, carrots, parsnips, vetches, and other green crops, enter largely into the agricultural produce of Ireland. The quantity of meadow land required for grazing purposes is very considerable.

Fisheries. — The seas around Ireland swarm with fish, and the inlets on its shores are the resort of vast shoals of the cod, herring, ling, hake, mackarel, and many others. There are extensive oyster-beds on the coast of Clare, and also in Loughs Swilly and Carling-ford. But this branch of industry is very imperfectly developed, and the Irish fisheries are not in a flourishing condition. Indeed their produce is quite inconsiderable compared with the abundant oppor-tunities afforded by nature, and salt fish are even imported from Scotland. Fresh-water fish abound in the rivers: there are valuable salmon-fisheries in the Bann, the Foyle, the Erne, the Boyne, and other streams, some of the produce of which is sent to the markets of Liverpool, Bristol, and London.

Manufactures.—Ireland is not distinguished as a manufacturing country. The principal manufacture is that of *linen*, chiefly carried on in the province of Ulster, though latterly extended into Connaught and Munster. Belfast and Armagh, with their immediate neigh-bourhood, constitute its principal seat. Lace of the finest description is made in Dublin and other localities.

The *woollen* manufacture, chiefly confined to the coarser kind of goods, is carried on in various parts of Leinster, at Dublin, Kilkenny, Wicklow, and elsewhere. The manufacture of broad-cloths has been introduced at Dublin, and that of fine stuffs at Bandon: a coarse kind of frieze is made by the farming population in most parts of the country during the intervals of agricultural labour.

The manufacture of *cotton* goods is prosecuted to a considerable extent at Belfast and its vicinity, and also in some parts of the south of Ireland, at Tullamore (King's County), and elsewhere. The manufacture of tabinet, or Irish poplin, a mixed fabric of silk and wool, is almost peculiar to Dublin. Some manufacture of muslin and cambric is carried on at Dundalk.

The distillation of whisky from malt is largely carried on, though not by any means to so great an extent as formerly, owing to the spread of more temperate habits among the population at large.

Beer is largely made in Dublin, and exported both to Great Britain and to foreign countries. Other manufactures pursued to a less extent are those of muslin, leather, glass, and vitriol.

Commerce.— The foreign trade of Ireland is inconsiderable compared with that carried on across the Channel, with Great Britain. The *imports* from abroad consist chiefly of tea, coffee, tobacco, sugar, wine, timber, tallow, flax, hemp, and wool; with, of late years, maize or Indian corn, chiefly from the United States. Coal is largely imported from England and Scotland, and also cotton, woollen, and hardware goods, with other British manufactures.

The *exports* are chiefly to Great Britain, and consist principally of agricultural produce (including vast numbers of live cattle and pigs), with salt beef and pork, eggs, &c.; and also linen manufactures.

Dublin is the principal seat of the foreign import trade, and next in order are Belfast, Cork, and Waterford; but the export trade both of Belfast and Cork is more considerable than that of Dublin. Waterford is a great seat of the cross-channel trade to England, and exports immense quantities of live stock and agricultural produce—consigned chiefly to Bristol. Both Drogheda and Dundalk have considerable export trade of butter and other farm produce.

Internal Communication.—The roads in Ireland are generally well laid out, and kept in good repair, unless in the remoter and more mountainous parts of the country.

Two principal *canals* (the Grand Canal and the Royal Canal) connect Dublin with the Shannon, crossing the great plain which occupies the interior of the country —with branches to many of the principal towns adjacent to their course. These are chiefly used for the conveyance of agricultural produce to the Irish metropolis. There are also some other canals and artificial navigations, but this mode of communication is not, on the whole, so extensively used as might be expected. The Shannon is extensively traversed by steamboats, both for passengers and goods.

Railways have made considerable progress in Ireland within recent years. There are at the present time above 2000 miles of railway open for traffic, by means of which the Irish metropolis is placed in rapid communication with all the more populous parts of the island. The first opened line was that between Dublin and Kingstown, a distance of five miles, completed in 1834.

Communication between Ireland and the metropolis of the empire has for some years past been effected with unexampled speed. The voyage between Dublin and Holyhead (the nearest port on the British coast) is performed by swift steam-packets in less than four hours. From Holyhead to London the journey by railway is performed in less than seven hours; so that, by the aid of steam, communication

is effected between the Irish metropolis and the capital of the British empire (a distance of upwards of 330 miles, 70 of which are water) in the almost incredibly short space of little more than ten hours and a half.

III. Topography.

Divisions.—The thirty-two counties into which Ireland is divided are of very unequal dimensions. Cork, the largest, has an area of 2,885 square miles, and Galway, the next in size, of 2,447 square miles. Louth, the smallest amongst them, is only 315 square miles in area, and Dublin only 354 square miles. The counties on the eastern side of the island are generally smaller than those to the westward. The provinces of Leinster, Ulster, Connaught, and Munster, now only recognised as geographical divisions, formerly gave their names to separate kingdoms, as also did Meath, which was long a distinct kingdom.

The division of Ireland into shires or counties, under their respective sheriffs and other officers, after the manner of England, was commenced under King John, in 1210. Twelve counties were erected by that monarch in Leinster and Munster—viz.: Dublin, Kildare, Meath,* Uriel (or Louth),† Catherlow (or Carlow), Kilkenny, Wexford, Waterford, Cork, Limerick, Kerry, and Tipperary. The present county of Wicklow was originally included within Dublin: Wicklow was not formed into a distinct county until the reign of James I. (1605).

Other counties were formed at various subsequent periods, as further portions of the island were subdued to English rule. Queen's and King's Counties—previously known as Glenmalery, Eastern and Western—were first erected, out of districts which had been the seat of a recent rebellion, during the reign of Mary (1557), the names

* Meath originally included the present Westmeath, together with the whole or part of Longford, Cavan, and King's County. Westmeath became detached from the rest of Meath in the early part of the 13th century, and remained independent of English rule during the ensuing hundred years. Westmeath was first erected into a county under Henry VIII. Longford, at first included within Westmeath, was made a distinct county under Elizabeth: Cavan, which was taken in part out of Meath, was constituted a distinct county during the same reign.

† Louth, however, was regarded as part of Ulster down to the reign of Elizabeth.

being given with reference to that sovereign and her husband, King Philip II. of Spain. Many portions of the island were first made shire-ground during the reign of Elizabeth, some not until the time of her successor James I. Monaghan was first constituted a county in 1584; Cavan about 1590. The greater part of Connaught became divided into counties during the reign of Elizabeth. Roscommon had been made subject to the English during the later half of the 13th century: but Leitrim, which had previously been regarded as part of Roscommon, was first made shire-ground under Elizabeth. Galway became so during the same reign (1585). Clare was erected into a county in 1565.

Ulster was later than any other portion of the island in becoming assimilated to the divisions established in virtue of English rule. Down, the south-eastwardly portion of Ulster, had been early overrun by the English (in 1177), and was originally divided into two distinct shires — Down and Newtown, or the Ards: but the greater portion was subsequently regained from the English by the native Irish chieftains, and from the early part of the 14th until the settlement of Ulster in the 17th century, it was for the most part beyond the English pale. Sheriffs were first appointed in Tyrone and Donegal in 1603.

Thirty of the counties are subdivided into baronies, very unequal in extent: the counties of Tipperary and Cork are each divided into two ridings. The parishes form both civil and ecclesiastical divisions, but their limits do not always coincide with those of the counties and baronies.

The ecclesiastical division is into two archiepiscopal provinces, those of Armagh and Dublin, and ten bishoprics — five in each province. The principal ecclesiastical cities in Ireland are Armagh and Dublin, each of which is the seat of an archbishop's see: Cashel and Tuam, which were formerly archiepiscopal cities, have since 1833 been reduced to the rank of subordinate dioceses. Many of the places which were formerly the seats of episcopal sees are now unimportant villages, and in most cases several of them have been merged together and formed into a united diocese.

The present dioceses are as follow:—In the province of Armagh,—*Armagh* and *Clogher* (united); *Meath*, *Derry*, and *Raphoe* (united); *Down*, *Connor*, and *Dromore* (united); *Kilmore*, *Ardagh*, and *Elphin* (united); *Tuam*, *Killala*, and *Achonry* (united).

In the province of Dublin,—*Dublin*, *Glandagh*, and *Kildare* (united); *Ossory*, *Leighlin*, and *Ferns* (united); *Cashel*, *Emly*, *Waterford*, and *Lismore* (united); *Cloyne*, *Cork*, and *Ross* (united); *Killaloe*, *Kilfenora*, *Clonfurt*, and *Kilmacduagh* (united); and *Limerick*, *Ardfert*, and *Aghadoe* (united).

Almost every part of Ireland abounds in remains of churches, and other ecclesiastical edifices — memorials of the primitive ages of Christianity in this island, and monuments of its early civilisation. There are, besides, numerous round towers, which are tall, circular buildings, of taper dimensions, some of them upwards of 100 feet in height, and probably the remains of pagan antiquity. The greater number of them are in ruins, though a few are still nearly perfect in external shape: altogether, the sites of 118 of these buildings have been discovered, of the great majority of which, however, only the foundations now remain. There are also, in various parts of the country, cromlechs, circles of stones, barrows, cairns, sacred hills, and other remains of early antiquity, most of them indicative of the forms of primeval worship which prevailed among its inhabitants.

Compared with the general density of its population, Ireland contains few large towns. Dublin, Cork, Belfast, and Limerick, are the only towns which have more than 50,000 inhabitants, and the only additional places of which the population exceeds 20,000 are Galway, Waterford, and Londonderry. The greater number of the towns have only from three to four or five thousand inhabitants; the population is chiefly rural, and distributed in villages and small farm holdings throughout the country.

The respective areas of the counties of Ireland, their populations in 1871, and the proportion of inhabitants to a square mile, are given in the following table: —

	Area in sq. m.	Pop. in 1871	No. of inhab. to sq. m.
LEINSTER: —			
Carlow	346	51,472	148
Dublin	354	405,625	1,146
Kildare	654	84,198	128
Kilkenny	796	109,302	137
King's County	772	75,781	98
Longford	421	64,408	153
Louth	315	84,198	267
Meath	906	94,480	104
Queen's County	664	77,071	116
Westmeath	709	78,416	110
Wexford	901	132,506	149
Wicklow	781	78,509	100

	Area in sq. m.	Pop. in 1871.	No. of Inhab. to sq. m.
CONNAUGHT:—			
Galway	2,447	248,257	101
Leitrim	613	95,324	155
Mayo	2,131	245,855	115
Roscommon	950	141,246	149
Sligo	721	115,311	160
ULSTER:—			
Antrim	1,190	419,782	352
Armagh	513	179,221	349
Cavan	746	140,555	188
Donegal	1,865	217,992	117
Down	957	277,775	290
Fermanagh	714	92,688	129
Londonderry	810	173,932	214
Monaghan	498	112,785	226
Tyrone	1,217	215,668	177
MUNSTER:—			
Clare	1,200	147,994	123
Cork	2,885	516,046	179
Kerry	1,811	196,014	108
Limerick	1,035	191,313	184
Tipperary	1,369	216,210	132
Waterford	713	122,825	172

The total areas and populations of the several provinces are:—

	Area in sq. m.	Pop. in 1871.	No. of Inhab. to sq. m.
LEINSTER	7,619	1,335,966	175
CONNAUGHT	6,863	845,933	123
ULSTER	8,312	1,836,398	220
MUNSTER	9,273	1,390,402	150

Ireland is represented in the House of Commons by 103 members, 64 of whom are representatives of Counties (the thirty-two counties returning two members each), 37 are representatives of Cities and Boroughs, and 2 represent the University of Dublin.

The following Cities and Boroughs return Two Members each.

Dublin.	Cork.	Limerick.
Belfast.	Galway.	Waterford.

The following return One Member each.

Armagh.	Dundalk.	Londonderry.
Athlone.	Dungannon.	Mallow.
Bandonbridge.	Dungarvan.	New Ross.
Carlow.	Ennis.	Newry.
Carrickfergus.	Enniskillen.	Portarlington.
Clonmel.	Kilkenny.	Tralee.
Coleraine.	Kinsale.	Wexford.
Downpatrick.	Lisburn.	Youghal.
Drogheda.		

Total County Members	64
„ Cities and Boroughs	37
„ University of Dublin	2
Total . . .	103

The following Table embraces the more important places that are historically noteworthy, within the British Islands:

ABERDEEN (numerous incidents) .	Aberdeenshire, on rivers Don and Dee
ABERNETHY (capital of Pictish kings) .	Perthshire, 6 m. S.E. of Perth, near confluence of rivs. Earn and Tay
ADWALTON MOOR (skirmish in 1642) .	Yorkshire, 5 m. S.W. of Leeds
AIRDS MOSS (slaughter of Cameronians in 1680)	Ayrshire, 16 m. E. by N. of Ayr, near Cumnock
ALNEY ISLAND (combat between Edmund Ironside and Canute, 1016) . .	Gloucestershire, in river Severn, above Gloucester
ALNWICK (battle in 1174) . . .	Northumberland, river Aln
ALFORD (victory of Montrose in 1645) .	Aberdeenshire, 25 m. W.N.W. of Aberdeen
ALRESFORD (skirmish in 1644) .	Hampshire (see p. 248)
ALTON (skirmish in 1643) . .	Hampshire (see p. 247)
ANCRUM MOOR (battle in 1545) .	Roxburghshire, N.W. of Jedburgh

ATHELNEY (retreat of Alfred, 878) . . Somersetshire (see p. 103)
ATHENRY (defeat of Irish in 1316) . . Galway, 12 m. E. of town of Galway
ATHERTON MOOR (battle in 1643) . . Lancashire (see p. 243)
AUGHRIM, or Aghrim (battle in 1691) . Galway, 4 m. S.W. of Ballinasloe
AULDEARN (victory of Montrose, in 1645) Nairnshire, near town of Nairn
AVEBURY (Druidical remains) . . . Wiltshire, 8 m. N.E. of Devizes
BANNOCKBURN (battle in 1314) . . Stirlingshire, near town of Stirling
BARNET (battle in 1471) . . . . Hertfordshire (see p. 176)
BARRA HILL (battle in 1307) . . . Aberdeenshire, 3 m. N.E. of Inverury
BASING HOUSE (siege in 1645) . . . Hampshire, near Basingstoke
BATTLE (Senlac, battle in 1066) . . Sussex, 6 m. N.W. of Hastings
BEACHY HEAD (naval action off, 1690) . Sussex
BENBURB (battle in 1646) . . . . Tyrone, 7 m. S. of Dungannon
BERKELEY (murder of Edward II.) . . Gloucestershire, 14 m. S.W. of city of Gloucester
BERWICK (council in 1291: frequent sieges, &c.) . . . . . Northumberland, on river Tweed
BIRMINGHAM . . . . . Warwickshire (see p. 194)
BLACKHEATH (battle in 1497) . . . Kent (see p. 179)
BLORE HEATH (battle in 1459) . . Staffordshire (see p. 170)
BOLTON CASTLE (residence of Mary queen of Scots, 1568) . . . . . Yorkshire, 10 m. S.W. of Richmond, between Askrigg and Leyburn
BOSWORTH (battle in 1485) . . . Leicestershire (see p. 178)
BOTHWELL BRIDGE (battle in 1679) . Lanarkshire, 9 m. S.E. of Glasgow, near Hamilton
BOYNE (battle of the, 1690) . . . Louth, 2 m. above Drogheda
BRADOCK DOWN (skirmish in 1643) . Cornwall (see p. 234)
BRENTFORD (skirmish in 1642) . . Middlesex (see p. 233)
BRIDLINGTON (naval fight off, 1779) . Yorkshire, on coast of E. Riding
BRIDGE OF DEE (victory of Montrose in 1644) . . . . . Aberdeenshire, 2 m. above Aberdeen
BURY ST. EDMUNDS (assembly of barons 1213) . . . . . Suffolk
BRISTOL . . . . . Gloucestershire (see p. 192)
BUTTINGTON (defeat of Danes by Alfred, 896) . . . . . Montgomeryshire (see p. 105)
CAMBRIDGE (incidents during Civil War, &c.) . . . . . Cambridgeshire, on river Cam
CANTERBURY . . . . . Kent, on river Stour
CARBERRY HILL (surrender of Mary queen of Scots, 1567) . . . . Edinburghshire, 7 m. S.E. of Edinburgh
CARDIFF (imprisonment of Robert duke of Normandy, &c.) . . . . Glamorganshire, mouth of river Taff
CARISBROOK (imprisonment of Charles I.) Isle of Wight, near Newport
CHALGROVE (skirmish in 1643) . . Oxfordshire (see p. 239)
CHATSWORTH (Mary queen of Scots confined, 1570) . . . . . Derbyshire, 7 m. N. of Matlock
CHESTER . . . . . Cheshire, on river Dee
CLARENDON ("Constitutions of," 1164) . Wiltshire, 3 m. E. of Salisbury
CLONTARF (defeat of Danes in 1074) . Near Dublin, N. side of Dublin Bay
COLCHESTER (siege in 1648) . . . Essex, on river Colne
CORRICHIE BURN (battle in 1562) . . Kincardineshire, 14 m. above city of Aberdeen, in valley of river Dee
CROPREDY BRIDGE (skirmish in 1644) . Oxfordshire (see p. 248)

CROYLAND (Abbey)	Lincolnshire, 12 m. E. of Stamford
CULLODEN MOOR (battle in 1746)	Inverness-shire, 5 m. S.E. of Inverness
DOVER (sea-fight off, 1217: cinque-port, &c.)	Kent
DROGHEDA (sieges in 1641 and 1649)	Louth, on river Boyne
DRUMCLOG (skirmish in 1679)	Lanarkshire, near Ayrshire border, 5 m. S.W. of Strathavon
DUBLIN	Dublin, on river Liffey
DUMBARTON (surprise of Castle, 1571)	Dumbartonshire, junction of Leven with Clyde
DUNBAR (battles in 1296 and 1650)	Haddingtonshire, on North Sea
DUNFERMLINE (burial-place of Robert Bruce, &c.)	Fifeshire
DUNKELD (battle in 1689)	Perthshire, 12 m. N.W. of Perth
DUPPLIN MOOR (battle in 1332)	Perthshire, 3 m. S.W. of Perth
EDGECOTE (battle in 1469)	Northamptonshire (see p. 175)
EDGEHILL (battle in 1642)	Oxford and Warwick (see p. 232)
EDINBURGH	Near S. shore of Firth of Forth
EMPINGHAM (battle in 1470)	Rutland (see p. 175)
EVESHAM (battle in 1265)	Worcestershire (see p. 163)
EXETER	Devonshire (river Ex)
FALKIRK (battles in 1298 and 1746)	Stirlingshire
FLODDEN (battle in 1513)	Northumberland (see p. 180)
FOTHERINGHAY (death of Mary, queen of Scots)	Northamptonshire, 9 m. S.W. of Peterborough
GAINSBOROUGH (skirmish in 1643)	Lincolnshire (see p. 244)
GLASGOW	Lanarkshire: river Clyde
GLASTONBURY (reputed burial-place of Arthur)	Somerset, near river Brue, 5 m. S.W. of Wells
GLENCOE (massacre of Macdonalds, 1692)	Argyleshire, S. of Loch Leven, W. coast
GLOUCESTER (siege in 1643)	Gloucestershire
GOODRICH CASTLE (siege during Civil War)	Herefordshire, 3 m. S.W. of Ross
GRANTHAM (skirmish in 1643)	Lincolnshire (see p. 242)
GREENWICH (royal residence, &c.)	Kent, near London
HADDENRIGG (battle in 1542)	Roxburghshire, 4 m. E. of Kelso
HALIDON HILL (battle in 1333)	Near Berwick (see p. 164)
HARLAW (battle of, 1411)	Aberdeenshire, N.W. of Inverury
HARWICH	Essex, river Stour (see p. 193)
HASTINGS (see BATTLE)	Sussex
HEDGELEY MOOR (battle in 1464)	Northumberland (see p. 174)
HEXHAM (battle in 1464)	Northumberland (see p. 174)
HOMELDON (battle in 1402)	Northumberland (see p. 166)
HOPTON HEATH (skirmish in 1463)	Staffordshire (see p. 241)
HORNCASTLE (see WINCEBY)	
HULL, Kingston upon	Yorkshire (see p. 193)
INVERCARRON, pass of (skirmish in 1650: defeat of Montrose)	Ross-shire, N.W. of Tain, at junction of river Carron with Firth of Dornoch
INVERLOCHY (Montrose's victory in 1645)	Inverness-shire, near Fort William, at outlet of river Lochy
INVERKEITHING (battle in 1651)	Fifeshire, on Firth of Forth, 3 m. S.E. of Dunfermline

ISLIP BRIDGE (skirmish in 1645) . . Oxfordshire (see p. 253)
KENILWORTH . . . . . Warwickshire, 4 m. N. of Warwick
KILLIECRANKIE, pass of (victory of Highland clans in 1689) . . . . . Perthshire, 14 m. N.W. of Dunkeld, on river Garry
KILSYTH (Montrose's victory in 1645) . Stirlingshire, 12 m. S.W. of Stirling
KINGSTON (on Thames) . . . . Surrey (see p. 260)
LANGPORT (battle in 1645) . . . Somerset (see p. 255)
LANGSIDE (Mary queen of Scots defeated, 1568) . . . . . Renfrewshire, near Glasgow
LANSDOWN (battle in 1643) . . . Somersetshire (see p. 236)
LARGS (victory over Norwegians, 1263) . Ayrshire, on Firth of Clyde, 11 m. S.W. of Greenock
LATHOM HOUSE (siege in 1644) . . Lancashire, near Ormskirk
LEWES (battle in 1264) . . . Sussex (see p. 162)
LEEDS (siege in 1139, & during Civil War) Yorkshire, on river Aire
LIMERICK (sieges in 1690, 1) . . . Limerick, on river Shannon
LINCOLN (victory over French, 1216; siege during Civil War, 1644) . . Lincolnshire, on river Witham
LIVERPOOL . . . . . Lancashire (see p. 196)
LOCHLEVEN CASTLE (imprisonment of Mary queen of Scots, 1567) . . . Loch Leven, Kinross
LONDON . . . . . Middlesex, &c. (see p. 188)
LONDONDERRY (siege in 1689) . . . Londonderry, on river Foyle
LYME REGIS (defence of, by Blake, 1644) Dorsetshire, on shore of Channel
LEITH (siege, while in hands of French, 1560) . . . . . Port of Edinburgh, on Firth of Forth
MAIDSTONE (skirmish in 1648) . . . Kent (see p. 259)
MANCHESTER . . . . . Lancashire (see p. 196)
MARSTON MOOR (battle in 1644) . . Yorkshire (see p. 252)
MERSEA ISLAND (Danish campaign, 893 *et seq.*) . . . . . Essex (see p. 105)
MIDDLEHAM (residence of Earl of Warwick, "king-maker") . . . . Yorkshire, 10 m. S. by W. of Richmond
MORTIMER'S CROSS (battle in 1461) . . Herefordshire (see p. 172)
NANTWICH (battle in 1644) . . . Cheshire (see p. 250)
NASEBY (battle in 1645) . . . . Northamptonshire (see p. 253)
NESBIT MOOR (border fight, 1354) . . Berwickshire, near left bank of river Tweed
NEVILLE'S CROSS (battle in 1346) . . Durham (see p. 165)
NEWARK-UPON-TRENT (sieges during Civil War, &c.) . . . . . Nottinghamshire
NEWARK CASTLE . . . . . Selkirkshire, by river Yarrow, 3 m. W. of Selkirk
NEWBURN (victory of Scotch, 1640) . Northumberland, on river Tyne, 5 m. above Newcastle
NEWBURY (battles in 1643 and 1644) . Berkshire (see p. 245)
NEWTON BUTLER (defeat of king James's army, in 1689) . . . . . Fermanagh, near head of Lough Erne
NORTH ALLERTON (battle of the Standard) Yorkshire (see p. 161)
NORTHAMPTON (battle in 1460) . . Northamptonshire (see p. 171)
NORWICH . . . . . Norfolk (see p. 195)
OTTERBURNE (border-fight in 1388) . . Northumberland (see p. 165)
OXFORD (incidents of Civil War: frequent parliaments, &c.) . . . . . Oxfordshire, rivers Isis and Cherwell

PENDENNIS CASTLE (incidents of Civil War)	Cornwall, entrance of Falmouth Harbour
PEMBROKE (siege of Castle by Cromwell, 1648)	Pembrokeshire, on Milford Haven
PENTLAND HILLS (skirmish in 1666)	Edinburgh, 7 m. S.W. of city
PERTH (earlier capital of Scotland, to 1437)	Perthshire, on river Tay
PHILIPHAUGH (surprise and defeat of Montrose, 1645)	Selkirkshire, on bank of Ettrick river near town of Selkirk
PIPERDEN (border-fight, in 1434)	Northumberland (see p. 166, *note*)
PINKIE (battle in 1547)	Edinburghshire, near Inveresk
PONTEFRACT (death of Richard II., 1399)	Yorkshire
PRESTON (skirmishes during Civil War, and in 175)	Lancashire (see p. 261)
PRESTONPANS (victory of Highlanders, 1745)	Haddingtonshire, 8 m. E. of Edinburgh
RATHLIN ISLAND (retreat of Bruce, 1306: massacre of Scots and Irish, 1575)	Off coast of Antrim
RAVENSPUR	Yorkshire (see p. 176, *note*)
REEDSQUAIR, or Redswire (border-fight, 1575)	Northumberland (see p. 166, *note*)
ROUNDWAY DOWN (battle in 1643)	Wiltshire (see p. 237)
ROWTON HEATH (skirmish in 1645)	Cheshire (see p. 256)
RUNNYMEAD (Magna Charta, 1215)	Surrey, near Egham, 2 m. W. of Staines
SANDWICH (cinque-port: sea-fight, and victory over French, 1350)	Kent
SARK, river (victory of Scotch over English, 1448)	On Scotch and English border, E. of Annan
SAUCHIE BURN (battle in 1487)	Stirlingshire, 8 m. N.W. of Falkirk, and near Bannockburn
SCONE (coronation-place of Scottish kings)	Perthshire, 2 m. N.E. of Perth
SELBY (skirmish in 1644)	Yorkshire (see p. 251)
SEDGEMOOR (defeat of Monmouth, 1685)	Somersetshire, 5 m. E. by S. of Bridgewater
SENLAC (Hastings, battle of, 1066)	Sussex (see p. 129)
SHEEN, West, afterwards RICHMOND (death of Edward III. and Elizabeth)	Surrey, on river Thames
SHEFFIELD (Mary queen of Scots, &c.)	Yorkshire (see p. 194)
SHERBURN (skirmish in 1645)	Yorkshire (see p. 257)
SHERIFFMUIR (battle in 1715)	Perthshire, E. of Dunblane
SHREWSBURY (battle in 1403)	Shropshire (see p. 167)
SKIPTON CASTLE (siege in 1645)	Yorkshire; Airedale, N.W. of Leeds
SMERWICK (Fort del Oro, capture in 1580)	Kerry, 28 m. W. by S. of Tralee, and 6 m. N.W. of Dingle
SOLEBAY (naval action in 1672)	Off Southwold, Suffolk
SOLWAY Moss (battle in 1542)	Cumberland, beside Scotch border and head of Solway Firth
ST. ALBANS (battle in 1455, &c.)	Hertfordshire (see p 169)
ST. FAGANS (skirmish in 1648)	Glamorganshire (see p. 259)
ST. HELENS, I. of Wight (naval fight, 1545)	On E. side of island, near Brading
STAMFORD (battle of, 1470: or ERPINGHAM)	Lincolnshire (see p. 175, *note*)
STAMFORD BRIDGE (battle of, 1066)	Yorkshire (see p. 107)
STOKE (battle of, 1487)	Nottinghamshire (see p. 197)

STONEHENGE (Druidical remains) . .	Wiltshire, 7 m. N. by W. of Salisbury
STOW-ON-THE-WOLD (skirmish in 1646) .	Gloucestershire (see p. 258)
STRATFORD (birth-place of Shakespere) .	Warwickshire, 8 m. S.W. of Warwick
STRATTON (skirmish in 1643) . . .	Cornwall (see p. 235)
TADCASTER (skirmish in 1642) . . .	Yorkshire (see p. 241)
TAUNTON (defence by Blake, 1644, 5) .	Somersetshire, on river Tone
TEWKESBURY (battle in 1471) . . .	Gloucestershire (see p. 177)
TIPPERMUIR (Montrose's victory, 1644) .	Perthshire, 4 m. W. of Perth
TORBAY (landing of Prince of Orange. 1688)	Devonshire: coast of English Channel
TORRINGTON (skirmish in 1646) . .	Devonshire (see p. 258)
TOWTON (battle in 1461)	Yorkshire (see p. 173)
TUTBURY (residence of John of Gaunt, Mary queen of Scots, &c.) . . .	Staffordshire, 18 m. E. by N. of Stafford, on river Dove
WAKEFIELD (battle in 1460) . . .	Yorkshire (see p. 171)
WALSINGHAM (monastery, "Our Lady of Walsingham")	Norfolk, 28 m. N.W. of Norwich, and 5 m. N. of Fakenham
WANTAGE (birth-place of Alfred) . .	Berkshire
WINCEBY (Horncastle)	Lincolnshire (see p. 245)
WINDSOR (royal residence) . . .	Berkshire
WOODSTOCK (residence of Alfred, Henry II., &c.)	Oxfordshire, 8 m. N.W. of Oxford
WORCESTER (battle in 1651) . . .	Worcestershire (see p. 266)
YARMOUTH	Suffolk, river Yare (see p. 193)
YORK	Yorkshire (see p. 191)

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